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PROCEEDINGS.

TENTH MEETING, June 2d, 1859. In the absence of the President, the Rev. Joseph P. Thompson, D. D., 3rd Vice President, took the chair.

On motion, the ordinary business of the Society, except the admission of new members, was suspended.

Herman Andersen, Samuel Dexter Bradford, Jr., Julius Bing, Malcolm Campbell, Robert J. Dodge, John S. Dunning, Daniel W. Fiske, James Lorimer Graham, Jr., Andrew F. Higgins, Henry B. Millard, William C. Miller, — Nugent, Bartholomew O'Connor, Edward P. Rudd, James M. Sanderson, Charles Tracy, J. Howard Wainwright, and Alexander R. Walsh, were elected Resident Members.

Thomas Hoyne, of Chicago, Ill., and Thaddeus Stevens, of Lancaster, Pa., were elected Non-Resident Members.

The Chair then stated that the particular object of the meeting was to enable the Society to pay a tribute of respect to their lately deceased Honorary Member, Alexander von Humboldt.*

Prof. Francis Lieber, L. L. D., then read a paper on "The Life and Character of Humboldt."

Resolutions, expressive of the Society's re-

gret at their great loss, were introduced by the Honorable Charles P. Daly, and, having been seconded by Professor Alexander Dallas Bache, L. L. D., in an eloquent and feeling address, unanimously carried.

Remarks were also made by Professor Arnold Guyot, and the Hon. George Bancroft.

Adjourned.

DEPARTMENT OF GEOGRAPHY.

NOTES ON SIAM.*

BY DAVID OLYPHANT KING, ESQ., OF NEWPORT, R. I.

Accompanying a Map of His Travels.

Having been the first to avail of the recent opening of the Kingdom of Siam, circumstances obliged me to be often absent from the capital city, and I beg to hand you herewith a copy of the map of my travels in that country and the adjacent Kingdom of Cambodia, sufficiently interesting, I trust, to warrant its reception at your hands.

With the exception of M. de Pallegoix's account of these countries, nothing has hitherto been published respecting them worthy of any confidence; and of the interior, beyond the city of Bangkok, the fanciful accounts of the natives served merely to excite a curiosity that

* A full report of the proceedings of this meeting, with the several addresses, etc., will be issued in a separate form.

* A letter dated Newport, R. I., Feb. 5, 1859, read before the "American Geographical and Statistical Society" on Thursday, 24th March, 1859, by John Jay, Esq., Foreign Corresponding Secretary. (*See Proceedings*, p. 65.)

a foreigner was unable to gratify. Permitted at last to investigate for ourselves, I became acquainted with Eastern Siam, and what is left of the old Kingdom of Cambodia; and although the many reported marvels in botany and natural history were successively followed up until they were proved fables, still the geographical features of a new country are always of interest, and a few general remarks respecting them may not be unacceptable.

The eastern shore of the Gulf of Siam stretches from Bangkok to Chantiboon, and beyond Kampoot, but the lofty range of mountains along the coast impedes communication, and the Petrio canal is exclusively used by travelers to or from the eastern provinces. This canal, fifty-five miles long, connects the city of Bangkok with the Bang Pa Kong river, and is made through a flat alluvial country, entirely devoted to the culture of rice. The natives, like the rest of the Siamese, appear to be a branch of the Malay family. The floors of their bamboo thatched houses are raised some four feet from the ground, their clothing simply a cloth round the waist, and whatever they may be engaged in, one hand is generally actively employed warring against the swarms of mosquitos.

The canal joins the Bang Pa Kong River twenty miles from the mouth of the latter. This river, as you ascend, becomes narrow and winding; cultivation is restricted to a strip of land on either bank at first, and then occurs only at intervals; the inhabitants are few and poor, and nothing that can be called a village is met with until you arrive at Pachim. Here, and elsewhere in Siam, the traveller is struck by the immense tracts of land laying idle for the want of a laboring population. Emigration from China would soon remedy the evil, but the Siamese rulers dread the introduction of any number of coolies, and restrict their importation.

Pachim is the residence of the governor of a province, and the traveler must land and show his passport. The officials are invariably civil and obliging, provided your passport comes

from their superior in rank; and custom among themselves obliges the foreigner to offer a small present before leaving. The town of Pachim consists of some twenty bamboo houses, and was entirely destroyed two years since—a fire from the prairie consuming crops and all. The river here is about forty yards wide, and during the rainy season, from July until November, runs out at the rate of five miles per hour: during the rest of the year there is a regular rise and fall of the tide here, and its influence is felt up to Kabin. Leaving Pachim, the navigation of the river is tedious, being against a strong current in the wet season; after which the river rapidly falls, and the channel is narrow and full of obstructions. An occasional glimpse of the mountains far off to the east and north is obtained, but the country along the river maintains its level character, and generally is densely wooded.

Twenty years ago, during a war with the Cochinchinese, a military road was constructed from the town of Wooang Kabin, at the head of navigation, across to the Tasawai River; and although the bridges have disappeared and the road is a mere wreck, still it is the only route across the country. Merchandise is conveyed in small, but neat, covered carts, drawn by a pair of buffaloes—travelers using elephants; and from this point over to the confines of Cochinchina, these latter animals occupy the place the horse does with us. They are large, docile, and well trained, and cheaper than anywhere else in the world—a full-grown animal being worth from \$50 to \$75. About two-thirds of the males are provided with tusks, and in buying and selling the natives appear to think nothing of the value of the ivory. Ten miles south-east from Kabin, I visited a spot on the bank of the river, where a number of natives were sinking shafts, in search of gold. From all I could learn, but little had ever been found, and of late scarcely any.

Elephant traveling over the military road is tedious and uninteresting. During the rainy season the streams are so swollen that the road is never traversed if it can be avoided, and the

want of water in the dry season is an ever present evil; the elephants soon become foot-sore and sick, if pushed beyond twenty-five miles per day; travelers are rarely met with, and solitary houses, twenty miles apart, only relieve the weariness of the route. One day out from Kabin the road winds around the base of a mountain, but with this exception, it is all a prairie across to Tasawai, occasionally broken and rolling, and then stretching for miles as smooth as a floor. The soil is of red sand, and the trees twisted and dwarfed in a manner I could never account for, until, caught upon one occasion by the fire that annually sweeps over these plains among them, I had an opportunity of seeing how the young trees were parched and shriveled by it. Bog iron, which occurs frequently, is the only metal to be found on the road.

The provincial town of Mattabong is situated on both sides of a river of that name, in the center of an immense plain. The country, for nearly a hundred miles around it, is flooded with water soon after the commencement of the rains, traveling becomes impossible except in boats, and wild animals wander off to the mountains. The existence of a large lake to the eastward has been reported to foreigners ever since their residence in Siam, and in the map accompanying M. de Pallegoix's work, it is incorrectly inserted. The native accounts of its size were found to be not far from the truth, and I passed completely round it, the shores everywhere being pleasantly diversified with forest and open prairie. The natives hold the lake in a sort of superstitious fear, its rough waves causing many accidents to their small canoes; and squalls and water-spouts are of frequent occurrence. During the months of January, February and March, when the water has drained off the surrounding country, the lake appears alive with fish, and the inhabitants collect large quantities of them. From September to December, the banks are overflowed from ten to twenty feet deep; in the lake, no bottom at ten fathoms; at the close of the dry season, in May, frequent shoals occur in its

bed, and a boat drawing two feet of water is all its shallowness will allow.

At the northern extremity of the lake, in the vicinity of Simrap, was situated the ancient capital of Cambodia, no trace of which now remains except in the Nokon Temple, spared from destruction on account of its religious character, when the city was taken by the Cochinese, about A. D. 200. The temple stands alone in the jungle, in too perfect order to be called a ruin—a relic of a race far ahead of the present in all the arts and sciences. A magnificent stone causeway, a third of a mile long, leads through an ornamental entrance up to the temple, composed of three quadrangles, one within, and raised above the other. The lower quadrangle is 200 yards square, a broad verandah, with a double row of square ornamented pillars running all round, with large and elaborately ornamented entrances at the corners and centers. It is built of hard grey sandstone, without wood, cement or iron in its composition, the blocks of stone fitting to each other with wonderful precision, and the whole temple, within and without, covered with carefully executed bas-reliefs of Buddhist idols. A few priests reside outside its walls, and the place is visited as a shrine by the Cambodians. On the eastern verandah, a square tablet of black marble has been set into the wall, covered with writing, and doubtless setting forth the main facts in the raising of the temple. The characters used are precisely similar to the present Cambodian alphabet, but so much has the use of the letters changed, that the present race cannot decipher it.

The Oodoong River issues from the the south end of Smith's Lake, and is throughout a broad, majestic stream. The town of Poontenang supplies the whole country with pottery, and from there to Oodoong scarcely a sign of human life is to be found. This city (Oodoong) is the present capital of Cambodia—the former city having been completely destroyed by the Cochinese, fifteen years ago. A wooden palisade, twenty feet high and 600 yards square, encloses a straggling collection of

thatched houses, the residences of the nobles, in the centre of which a low brick wall encloses the palace, mint and arsenal. Everything bespeaks poverty, and the recent ravages of war; but nothing could exceed the friendliness of the welcome extended to us by the King, and we were assured that foreign travelers would be willingly granted every facility.

On the river below Oodoong, the Roman Catholics have a mission establishment, at Pena Loo, where we found a bishop and one priest, and descending the river, stopped at Pelompeng, a town on the borders of Cochin-China. This is a place of some little trade—raw silk, iron, dried fish, &c., being brought here from the Cambodia River—but the crowds of Cochin-Chinese in the streets manifest anything but kind feelings. From a hill in the rear of the town, the further course of the rivers, as shown in my map, was noted; the Cambodia River, after receiving the Oodoong River, turning due east, with a breadth not less than two miles.

The elephant road from Oodong to Mattabong, like the rest of the roads, is only available during the dry season, and as far as Potisat, winds through a hilly region. Near this town a large deposit of antimony is found, and also quarries of Oriental alabaster. The journey from Mattabong to the coast at Chantiboon usually occupies six days, the crossing of the coast range of mountains causing some delay, and affording nothing in scenery in return.

The botany and natural history of this region, so far as I can judge, afford nothing new or strange. The annual overflow of the plains is favorable to nothing except aquatic plants, and the water lily is common everywhere. In addition to white and purple lilies, and the common lotus, a bright cherry colored variety is found at Sinrap. At Penit Pza, a lily was said to exist, surpassing in size and beauty the *Victoria Regia*. It was not in flower at the time of my visit, and the leaf of the plant was similar to the lotus. The cork tree, wild nutmeg, licorice, and several varieties of india rubber and gutta-percha, are met with in the mountains, but not in sufficient quantities to

be of commercial value. My endeavors to meet with the tree producing the gamboge gum were unsuccessful, it only being found in the mountainous region between Chantiboon and Kampoot.

The wild animals of the country are not as numerous as might be supposed. The natives say that twenty years ago an epidemic swept off immense numbers of them; and though tracks of deer, buffalo, wild cattle and pigs, are often seen, the animals are few and wild, and seldom met with. Wild elephants and rhinoceri are found in remote districts, and the tiger and leopard are heard of occasionally everywhere. The natives hold these last in but little fear, saying they have never been known to attack any one that faced them. This country has long enjoyed a reputation for abounding in reptiles that does not belong to it. The skins of anacondas offered at Bangkok come from the northern provinces, and in all my travels I never saw but four snakes, all small. The annoyances of travel are caused by smaller specimens of animal life. Ticks are common, and require constant care; mosquitos are often very troublesome; and swarms of large horse-flies, that bring blood through an elephant's skin, sometimes drive men and animals almost wild; but the greatest nuisance are the ground leeches. The first shower of the rainy season brings into life a crop of leeches, that grow to some three inches long, and infest the face of the earth. Warned, by the rustle of the leaves or the jar of the ground, of the approach of something living, they erect themselves on one extremity in the pathway, and swing round and round, trying to cling to what is passing by. Halt in the path, and you can see them coming in hurried spans from all sides; drive your pantaloons inside your boots, and they climb up and get down your neck. To sleep in the open air is impossible, as they rest not at night, and animals of all sorts are covered with them.

The birds of the country are mostly of the wading species. Pelicans and ducks are common, but the adjutants and birds of the crane

family are innumerable; eagles and vultures are commonly found in the vicinity of carrion, and the shoe-horn bird of Sumatra is occasionally met with in the forest.

So far as my experience goes, this land is poor in minerals. A little gold is obtained, but iron is the only thing found in any quantity; no trace of coal anywhere. The mountainous region along the coast is doubtless richer, but is at present unknown.

With these remarks, I commend the accompanying map to your attention.

REMARKS OF THE HON. CHARLES P. DALY.

Judge Daly said that the acknowledgments of the Society were due to Mr. King for the interesting paper he had forwarded. Traveling through a country as yet but imperfectly known, he had been careful to observe those things which travelers generally neglect, and as careful to omit what they usually thought it important to relate. He has carefully observed the natural features of the country over which he passed—the soil, its capacity for cultivation; the means of irrigation, and the industrial state and condition of the inhabitants; the winding and course of the roads; the width, direction and strength of the current of rivers; the probable limit and nature of the mineral deposits; the flora, and fauna, correcting our impressions both as to the numbers and variety of the former, and removing the prevalent impression that the country east of the Menam abounded in reptiles. This indeed is what such a communication should be—a contribution to our knowledge of geography.

In respect to the temple described by Mr. King, it is to be inferred from its locality and structure that it belonged to a later period than that which produced those stupendous works, the excavated rock-temples, grottos and pagodas, which are found at Elephanta and Salsette in Bombay, at Ellora and Deoghur, along the Coromandel coast from its northern to its southern extremity, and in the island of Ceylon. In some respects the temple resembles the great pagoda at Seringham, situated

near the southern extremity of the Indian peninsula, and that on the island of Ramisseram, between the peninsula and Ceylon—the former of which is a seven-fold inclosure, or court-within-court, rising like this temple pyramidally; and the latter has similar to this, a grand entrance leading up to the principal temple. As the worship of Brahma is said to have been brought from Ceylon to the Malayan peninsula and the adjacent islands, the religious architecture connected with that worship would naturally follow; but it is observable that in that great group of architectural remains, the chief seat of which is the island of Java, and to which this temple from its proximity must be regarded as belonging, a far greater perfection in art is exhibited than in Ceylon or in the Indian peninsula, especially in the use of the arch. It is here that those quadrangular enclosures, rising one above the other as in the temple seen by Mr. King, constitute the prevailing style. The temple of Boro Budor, in Java, has six of these enclosures, and that of Brambanan, in the center of the island, consists of five parallelograms one within the other, embracing on the whole nearly three hundred temples or chapels. In the island of Madura near Java, there is one of those pyramidal pagodas, surrounded by ornamental pillars like the temple in Cambodia. All the chief features of this temple, as described by Mr. King—its series of quadrangular enclosures, rows of ornamented pillars and verandahs, its blocks of stone fitting so exactly, its highly ornamented entrance, its walls covered with figures carefully executed in bas-relief; its inscribed tablet set in the walls—denote that it belongs to that period of advanced civilization and development of which we know so little, but the evidence of which appears in the extraordinary architectural remains existing, especially in Java. A comparison of the description and drawing of the temple to be found in Sir Stamford Raffles work on Java, and that of other writers on the Indian Archipelago, would seem to warrant this conclusion. It might be expected that a temple found in this locality would possess the

general features of those in the neighboring kingdom of Burmah, which date from about the eleventh century; but the Burmese architecture—judging from the drawings and description of Mr. Yule in his recent work on Ava, especially of the extensive mines which he found at Pagan—is different, abounding largely in the use of the arch, and, very strangely in that quarter of the world, combining much of the Saracenic with the general ground plan of the cruciform gothic. It was to be regretted that Mr. King had not copied the inscribed tablet he saw set in the wall of the temple. Similar inscriptions from Java had been preserved by Raffles, and would be found carefully engraved in his work. The attention of scholars was now actively turned to the languages of the Indian Archipelago, and every inscription of a character like this would be useful. Mr. King, on the authority of the present ruler of Cambodia, considers this temple as dating back to the second century. This is a period much earlier than has generally been assigned to the large and elaborate religious structures of the Indian Archipelago. The period of their erection is usually fixed between the sixth and ninth centuries; but our knowledge upon the subject is very imperfect, and archeologists are scarcely in a position to dispute the point with his majesty, the King of Cambodia.

Judge Daly then referred to the importance of the recent relations established between the United States and Siam, and what might be expected to grow out of it. The public interest had been chiefly attracted by the opening of Japan through the efforts of our government, and great anticipations had been formed of the important consequences that would result from it. It might be doubted, however, at least in a commercial point of view; if more solid advantages would not accrue to the Union from the change in the restrictive policy that had hitherto closed Siam against all intercourse with the maritime nations of the world, than would result from the expedition to Japan. The opening of Japan had exhibited a state of things very different from what might have

been expected from the course pursued by that remarkable people, in having no communication with Europe or America, except through the channel of one nation, and that of the most limited and restricted kind. We had found them in a high state of material prosperity, polite, industrious, temperate, exceedingly intelligent, and exhibiting all the marks of an orderly and well governed people. If they had not reached the perfection in the arts, sciences, and general knowledge to which the western nations have attained, they did not at least present those extremes of social condition—the poverty, misery, pauperism, and vices inseparably linked with, and which stand in such fearful contrast with our highest form of modern civilization. Our consul, Mr. Harris, had declared in a recent communication that in no country in the world was there so little poverty; none where the mass of the people enjoyed more solid and substantial comforts with less of harrassing and debilitating labor; and the picture of national prosperity and happiness was so striking as to draw from him a very fervent hope that his coming among them might not be referred to hereafter as marking the period when a change for the worse took place in their national condition. It was a grave question whether a people so situated would be benefited or injured by closer contact with the maritime nations of the world, and whether the production of the country would be more than adequate for the wants of a population so numerous, and who would have but little to offer in exchange. Commerce, it was true, created artificial wants, but it was to be remembered that the Japanese were not an indolent people in possession of a fruitful country, who might be stimulated by commerce to greater exertion, but a very numerous, thriving and industrious people, generally estimated at over fifty millions, who had hitherto consumed nearly all which they produced. In the commerce they had maintained with the Chinese and Dutch, they had little to offer except camphor, copper ingots, silk fabrics, lacquered ware, and porcelain, in exchange for

dyes, spices, sugars, sperm oil, cotton and linen cloths, and a few of the metals; and even this trade was very limited.

Siam presented a marked contrast to this condition. It was a tropical country, abounding in nearly all the valuable productions of the east, and, with an industrious population, could furnish vast quantities for export. It was especially rich in spices, gums, in the costly woods and other articles so highly valued in commerce; and for the great staples which support a population, such as rice, it was one of the most productive countries in the world. But whilst thus highly favored by nature, it was inhabited by a people who, though temperate, reverential, and even gentle, were, by the common agreement of all travelers, crafty, mean, ignorant, lying, conceited, slavishly servile, and universally indolent. Though much larger than the three islands of Japan proper, and with a soil capable of yielding much more abundantly, its population was not more than one-tenth of that of Japan. Here was a field for civilization and its fruits. Three American missionaries have been established for some years at the capital, Bangkok; and though their mission has not been crowned with much success—for it was believed that they had not made one Siamese convert to Christianity—still these gentlemen had done a great deal for mankind by enlightening and enlarging the views of the present ruler of Siam, his prime minister, and several influential members of the government; and it was undoubtedly to their labors chiefly that we are indebted for the change in the restrictive policy of the government, and the success of the mission of Sir John Bowring and our commissioner, Mr. Harris. The King of Siam had acquired a knowledge of the English language, and for an Asiatic monarch he spoke and wrote it with tolerable proficiency. His brother had given much attention to the study of medicine, and had recently been elected a member of the Medical Society of this city—an honor he valued very highly. The government had evinced great interest in this country, and it

was for us to keep up and strengthen that feeling. The present was but the beginning of a commercial intercourse that might be greatly enlarged hereafter, especially with the extension and development of our own empire on the Pacific. It was well, therefore, that the attention of our people should be drawn to this important country; that our merchants, especially, should turn their eyes in that direction, and ascertain what advantages Siam offers for more extended commercial relations. Our merchants would no doubt follow up the pathway that had been opened by our missionaries, and through the stimulating influence of commerce, this rich and fruitful country would be brought to contribute to the productive industry and advancing civilization of the globe.

BRITISH COLUMBIA.

Governor Douglas has issued a proclamation, declaring that a new town, to be the capital of British Columbia, would be laid off on the northern bank of Fraser River. The plans were to be published in March, and one-fourth of the lots reserved for purchasers from the United Kingdom and Canada; the other three-fourths would be sold by auction in April, to the highest bidder. The purchasers of town-lots in Langley who had paid in full, would be permitted to surrender them, and have the purchase-money applied in payment of lots at the new capital.

The proposed capital will be declared to be a port of entry, and vessels will be enabled to proceed direct to Fraser River without, as heretofore, touching at Victoria, or may touch at Victoria at their option.

The new town is to be called Queensborough, and will be at the mouth of Pitt River, five miles from the mouth of Fraser, and fourteen miles below Langley.

In the same proclamation, announcing his intention to found a new capital, Governor Douglas has issued some regulations about the lands and mines of the Colony. He declares that all the lands and mines belong to the Crown in fee; that the lowest price of the

land shall be \$2 50 per acre, and that all the land except such as may be specially reserved shall be sold, but that the ownership of mines of gold and silver shall still remain with the government.

EXPLORATIONS AND SURVEYS.

Orders have been issued by General Harney, commanding in Oregon, directing four companies to open a wagon-road between the Columbia and Great Salt Lake City. The expedition is to be commanded by Capt. Wallen, 1st Lieutenants Bonnycastle, Johnson and Sweetzer, and 2d Lieutenants Reno, Houston, Roberts and Dixon, and Assistant-Surgeon Randolph. The objects of the expedition are stated to be "to increase the facilities of communication between the Columbia River and the Valley of the Great Salt Lake, in connection with the overland route to the frontiers of the Western States, by opening a good wagon road to the Snake River, in the vicinity of the mouth of the Malheur River, and from there to a point called the 'City Rocks,' at the junction of the road from Forts Laramie and Bridger with the road from Fort Hall to Great Salt Lake City."

By the latest advices from Oregon (20th May, 1859), Lieutenant Mullan and his party had arrived at Portland. They would immediately go to work on the survey, and cutting through a wagon-road from Walla-Walla to Fort Benton. By the same mail we learn that the steamer Col. Wright, on her last voyage, ascended the Snake River some 50 miles—that is to the site of Fort Taylor, at the mouth of Tu-keh-non—encountering between the mouth of the Palouse and the Tu-keh-non, a distance of three miles, a very strong rapid. Hereafter, in connection with the movement on Colville, she will make the landing at the mouth of the Palouse, where she will also land the supplies for the Fort Benton road party, whose labors will be greatly facilitated and shortened by this inauguration of steam navigation on the Snake. The Columbia is now regularly navigated by steamers, in all its length below

the Palouse, only requiring transhipment at the Dalles.

In South America, the Frenchman, Dr. Plaszard, who is settled in Ciudad Bolivar, has undertaken an excursion into the interior of Venezuelan Guayana, and found gold to the south of the lower Orinoco, toward the Yuruari.

At Rio Janeiro, Messrs. Capanema, Lagos and Gonsalvo Diaz are preparing for a second expedition into the interior of Brazil, which is almost entirely unknown, and in the possession of wild Indian tribes. They will have a military escort.

AFRICAN DISCOVERY.

The great center to which most discoverers instinctively turn, is still the interior of Africa. Those vast countries which are represented in blank on our maps, have been attacked from all sides—east, west, north and south.

The renowned Dr. Robert Livingstone is now making an excursion in those countries which he discovered during his long journey from St. Paul de Loanda to Quilimane. He embarked last year, equipped with instruments for making scientific observations. He will first attempt to go up the Zambeze River in a canoe, which he has named "Ma Robert," or Robert's wife or mother, as the natives along the Zambeze River have great respect for the wife and mother of a man whom they admire.

The English steamer, the Rainbow, sailed on the 6th January out of Bonny into the Gulf of Benin, to explore the country along the Niger.

Ladislaus Magyar of Theresiopol, in Hungary, who, after the Hungarian insurrection, became a citizen of Brazil, has hit upon a rather singular but very prudent way to penetrate into the mysteries of inner Africa with the greatest possible safety and advantage. He has just married the daughter of the black King of Bihe in Upper Guinea. He has become Commander-in-Chief of the armies of his father-in-law, and uses his authority and his soldiers

to become acquainted with the countries lying in his neighborhood.

Jules Braouerec, commander of the corvette *Oise*, is now exploring the wholly unknown country through which the Gaboon River has its course.

The Swedish discoverer, Anderson, has traveled Ovampo, on the West Coast of Africa, south of Benguela, in the direction of the Cunene River.

On the east and south coast of Africa, two English officers, Capt. Burton and Lieut. Speke, found and measured last summer the great Lake Uiyi, between 3 deg. 30 min. and 8 deg. 40 min. south latitude—not to be confounded with Lakes Nyassa and Ukerewe, so much talked of in late years. Until this discovery, there was ground for belief in a great central sea in Africa, stretching from 12 deg. south latitude to the equator; but this discovery is conclusive that the great bodies of water which have hitherto been discovered at widely distant points are separate lakes.

The French missionary, Leo des Avanchers, is traveling though the country, which lies to the eastward of this great sea. The German traveler, Albert Roscher, has gone in the same direction, having left Zanzibar with the hope of penetrating far into the interior.

Pedro de Gamitto, Governor of the Portuguese forts Tete and Sena on the Zambeze, is making preparations for new explorations in Central Africa, of which he has already given such interesting descriptions in his book titled "*Muata Cazembe*."

Massaga, the Sardinian missionary, is now exploring the interior of Abyssinia; so also is Bayssiere.

The Upper Nile is the object of untiring exploration. It would be strange if, before the end of this century, its whole course were not as well known as is now that of the Thames, the Seine or the Rhine. While the ægyptologists and archæologists like Mariette, Deveria, Pommereuil, de Seibly, Brugsch, Eckhold and others are searching out the mysteries of Ancient Egypt far up into Nubia, scientific men

have undertaken, singly or in small numbers, to follow the Nile upward, in spite of all the difficulties which for three thousand years have baffled the bravest explorers. Messrs. Firth and Windham are about starting to go up the White Nile in an iron boat thirty-six feet long, drawing but one foot of water. They will be accompanied or followed by Messrs. Thomas, Miani and others.

On the 27th of February last, the Sardinian traveler, Brun-Rollet, died at Khartoum, on the boundary between Nubia and Abyssinia. He had penetrated all the country bordering on the upper Nile, and discovered Lake No, in lat. 12 deg., and the Bahr Keilak, or Misselad, which belongs to the western basin of the Nile.

McCarthy, the son of the geographer, has it in contemplation to travel on a new track to Timbuctoo from Algiers, where he has lived these eight years. According to his plan, he will pass through Laghouat and Goleah, then make a circuit to the east to get out of the way of a tribe of Arabs who have been bejuggled by a new prophet, and then continue his journey by Ghadames, Ghat and Lake Tsad.

Other travelers, also, such as Capt. Magnan, Baron Kraft, and Yussufben Gallabi, are bent on discovery, starting from Algiers or other northern points.

ASIATIC RESEARCH.

Asia is also attracting attention and being explored by many travelers. Kriel has been sent by the Vienna Academy into Asiatic Turkey. Rey is exploring some hitherto neglected portions of Syria and Palestine. The brothers Schlaginweit are still continuing their researches in Central Asia. A Russian scientific expedition is engaged in the exploration of Chorassan; while a detachment of the French troops in Indo-China is escorting a scientific corps through that country. Many other savans have received missions from the Ministry of Public Instruction, or from the Paris Museum. Beside this, the Catholic and Protestant missionaries are coming more and more

to consider it a part of their duty to send home precise and comprehensive ethnographic and and geographic intelligence of the countries through which they travel.

CONNECTION OF THE NORTHMEN WITH THE EAST.

Communicated by PROF. CHARLES C. RAFF, and intended to draw attention to the "ANTIQUITES RUSSES ET ORIENTALES d'après les monuments historiques des Islandais et de anciens Scandinaves," a work edited by him, and published by the ROYAL SOCIETY OF NORTHERN ANTIQUARIES, (tome I-II, with 23 plates, Copenhagen 1850-1852, in imp. 4to.)

The period when the Northmen wandered from their home in the East to Northern Europe, is removed far back and presents itself in darkness and myths. Future inquiries will perhaps explain how long their forefathers retained their speech and manners in their eastern abode. In this place we would only point out the remarkable fact, that the same age which saw the Northmen discovering and colonizing Iceland in the far west, beheld them also reappearing in the East, and with extraordinary energy. Summoned thither from the Scandinavian North, Nestor assures us that, under the name of Variago-Russians, they established the Russian empire in 862, and for more than a century exercised great influence over its affairs, both internal and external. The correctness of this statement by the Slavonic chronicler, and the important part played by the Scandinavian Russians in the first period of that power, becomes evident at once from the names borne by the historical actors themselves, almost all of which belong to the Old-Danish or Old-Northern language, and are recognized in the Northern Sagas and Runographic monuments. They are easily known, in spite of their being corrupted by the spelling of the Slavonic writer: Rurik, Sineus and Truvor (Rørik, Sune, Thurvard); Oskold, Dir (Hoskuld, Dyri); Igor, Oleg, Olga (Ingvar, Hølge, Høelga). The men "of the Russian nation" sent by Oleg in 907 and 911 as ambassadors to Constantinople, all were North-

men: Karl, Frialaf, Vermund, Rolf, Steinmod, Ingiald, Gauti, Roald, Kar, Freyleif, Roar, Eythiof, Thrain, Leidolf, Vestar. In Igor's great embassy of more than 50 persons, who in 944 concluded the important treaty with the Greek Emperors, Karamsin has only found three Slavic names. The rest are Northern, such as: Ivar, Vigfast, Eylif, Leifr, Grim, Kar, Kolskegg, Kol, Hallvard, Frode, Audun, Adolf, Ulf, Gamle, Bursteinn, Asbrand.

The names given by Byzantine authors to the vessels of the Russians, *skedia*, *karabion*, *askos*, will be found among the Skaldic names of ships in the Snorra-Edda: *skeid*, *karfi*, *askr*. In his book on the government of the empire composed in 949, the Emperor Constantine Porphyrogenneta mentions the principal waterfalls or fosses in the Dnieper passed by the Russians in their expeditions to Constantinople. He names them both in Russian (*roosisti*) and in Slavic (*sklabinisti*), and adds their signification in Greek. The Russian names, as has already been shown by preceding authors, are pure Old-Northern: *Easoupe* (*ei sofa*) i. e. not to sleep; *Oulborsi* (*holmfors*), the holmfoss, *Gelandri* (*giallandi*), the yelling; *Aeiphar* (*efr*, vehement), the wasting; *Barouphoros* (*barufors*), slav. *vulnuprag*, the billowfoss; *Leanti* (*hleandi*, the laughing, or *loandi*, the soil washing); *Strouboun* (*strengbuna* or *strandbuna*), the little foss. Liutprand, bishop of Cremona, who visited Constantinople in 946 and 968, expressly asserts that the people whom the Greeks called Russians (*Roos*), were the same nation as those named Northmen by the Frankish authors. These Northmen (Danes, Swedes, Norwegians and some English) flocked, usually by land through the Russian territory, and took service under the name of Verings (*Barangoi*) in the Imperial guard.

A remarkable confirmation of the statement made by Nestor would be afforded, if we could as is probable, venture to assume that the Igvar occurring on several Swedish Runic stones is the Russian grand-prince Igor. Sixty Runic monuments have been carefully examined and copied for this work, many of them by per-

sons specially employed by the Society for this purpose; twelve of these inscriptions speak of an Igvar, and are carved in memory of men who had taken part in his expedition (*i faru med Igvari*), some of them as ship-commanders.

The work, to which Icelandic, Norwegian, Swedish and Danish scholars have contributed valuable papers, commences with extracts from the Eddas and the mythic-historical Sagas, among which the whole of the remarkable *Sogubrot* or Saga-frament on the old Kings of Denmark and Sweden, and the whole of the charming and important *Hervarar Saga*. Next follow numerous extracts from the Old-Northern historical Sagas. The Northmen made frequent voyages to Gandvik (the White Sea) and Biarmaland, and over the Baltic to Austrveg. The history of the Kings of Norway in the 10th and 11th centuries touches that of Gardaríke or Russia in numberless instances. Olaf Tryggvason passed his youth there. The Norwegian prince Eymund repaired thither in 1015, and took part in the feuds between Iaroslav, Burislav and Vartislav; the whole of one Saga is devoted to this Eymund. Saint Olaf was intimately connected with the Russian court, and his son Magnus the Good, afterwards King of Norway and Denmark, spent there a good part of his youth. Together with Rognvald Brusason, at a later period Earl of the Orkneys, Harald Hardrade was long the Lord of the marches to the grand-prince, and Harald himself was afterwards Chieftain of the Vering-guard in Miklagard (Constantinople). The *Færeyinga Saga* speaks of Rafn called Holmgardsfare on account of his voyages to Novgorod, and mentions the *Færingman Sigmund's* expedition to Gardaríke. The lives of native Icelanders contain numerous similar accounts; thus Egil's Saga tells us of Egil's and Thorolf's exploits in Courland, and Nial's Saga has preserved the details of Gunnar's and Kolskegg's attack on Reval and Eysysla. In 1009 Biorn Arneirson heroically distinguished himself in the service of Vladimir the Great. Another still more famous Icelandic bard and hero, Thormod Kolbrunarskald, after living

several years in Greenland, betook himself to Norway in company with another native American, Skuf, owner of Stokkanes at Eriksfiord and probably kin with the celebrated Gudrid, wife of Thorfinn Karlsefne; in 1029 both followed Saint Olaf to Gardaríke.

The attention of English readers is directed to an Old-English or Anglo-Saxon document, the voyages of the Northmen Ohthere and Wulfstan in the North of Europe as related by King Alfred. This paper, with its numerous illustrative notes, is communicated by P. A. Munch. An accompanying facsimile of the MS. in the British Museum has been kindly forwarded by Sir Henry Ellis.

As an illustration to the ancient Icelandic Geographical Monuments, a Mappemonde from the 12th century and three Planispheres from the 13th and 14th have been appended. These are remarkable for having the same orientation as those of the Arabian cartographers in the middle ages—they have the south at the top. Among the geographical annotations for which we are indebted to the abbot Nicolas of Thingeyrar in the north of Iceland, is a journey to the Holy Land in 1151–1153, containing interesting notices for comparison with other voyages to the East at the same period; among them is an Arabic appellation not found in other European voyagers of the same date. To this division also belongs a plan or ichnography of Jerusalem.

THE MAELSTROM.

The very existence of the maelstrom off the Norwegian coast has of late years been questioned, and the ancient accounts of its terrible power been considered as doubtful. M. Hagerup, Minister of Marine, however, has recently given a valuable account of it, and set at rest the merits of the question in favor of its existence and very dangerous character. The vast whirl is caused by the setting in and out of the tides between the islands of Mosken and Lofoden, and is most violent half tide between ebb and flood. At the highest and lowest points of the waters it disappears for about half an

hour, but recommences its whirl with the moving of the waters. In calm weather large vessels may pass over it in safety; but in storms it is perilous to the largest craft. Small boats are endangered in any weather at the time of its strongest action. The whirls, however, do not, as was once supposed, draw vessels under the water, but by their violence fill them with water, or dash them upon the neighboring shoals. In winter, says M. Hagerup, it not unfrequently happens that at sea a bank of clouds shows a west storm, with heavy surf, to be prevailing there, while further in on the coast the clear air shows that on the inside of the West-tjord (east side of Lofoden) the wind blows from the land, and sets out through the tjord from the east. In such cases especially an approach to the maelstrom is in the highest degree dangerous, for the stream and under-current from opposite directions work there together to make the whole passage one single boiling cauldron. At such times appear the mighty whirls which have given it the name of maelstrom (that is, the whirling or grinding stream), and in which no craft whatever can hold its course. The writer considers that it is quite impossible for even a steamer to force its passage during a winter storm, and unadvisable, under any circumstances, for a sailing vessel to undertake the risk. In the most propitious season a sailing vessel might encounter a calm or a light wind, whereby the power of the stream would become greater than that of the wind, leaving the vessel no longer under command, and on a dangerous coast.

QUICKSILVER IN CALIFORNIA.

A rich quicksilver mine, called the Lawreneel, has been discovered on the Fossatt claim, a mile and a half from the New-Almaden mine. Sixty men were employed (June 23) in putting up buildings for dwellings, smelting-houses, etc. The discoverer says that next to New Almaden, it is the richest quicksilver mine in the State. The New-Almaden, the Lawreneel, the Guadalupe and the New-Idrin are the only quicksilver mines in California now worked.

The quantity exported in 1853 was 18,800 flasks; in 1854, 20,963; in 1855, 25,968; in 1856, 23,924; in 1857, 27,262; and in 1858, 26,212 flasks. The flask averages 75 pounds avoirdupois. The quantity retained in the State for domestic operations must also be large.

POSITIONS ON LA PLATA.

(From Page's La Plata, etc.)

Places.	Lat.		Long.		Altitude of the river.
	South.	West.	West.	West.	
Montevideo...	34° 54'	08"	56° 13'	00"	...
Higueritas...	34° 52'	25"	58° 25'	55"	...
Buenos Ayres...	34° 36'	14"	58° 33'	00"	...
Colonia.....	34° 28'	15"	57° 52'	00"	...
San Isidro....	34° 28'	00"	58° 30'	45"	...
Martin Garcia.	34° 10'	53.7	58° 16'	28.6	...
Rio Negro(<i>mo</i>).	33° 21'	33"	58° 25'	37"	...
Paysandu	33° 18'	24"	58° 07'	28"	...
Frey Bentos ..	33° 07'	13"	58° 20'	25"	...
Concepcion del Uruguay...	32° 29'	32"	58° 14'	55"	...
Salto del Urug.	31° 23'	20"	57° 59'	39"	...
San Pedro					
(near).....	33° 41'	00"	59° 39'	34"	82
Rosario	32° 56'	44"	60° 36'	04"	100
Las Vacas.....	32° 10'	00"	60° 41'	43"	...
Diamante	32° 04'	04"	60° 38'	56"	127
La Paz.....	30° 44'	08"	59° 38'	42"	160
Goya (near)....	29° 07'	00"	59° 21'	20"	...
Bella Vista...	28° 29'	00"	59° 07'	01"	220
Corrientes....	27° 27'	31"	56° 52'	51"	248
Carmen.....	27° 12'	30"	56° 14'	21"	...
San Cosmi....	27° 19'	09"	56° 24'	48"	...
San Rafael....	27° 07'	39"	56° 50'	21"	...
Cerito	27° 17'	32"	58° 39'	52"	...
Santiago	27° 07'	39"	56° 50'	21"	...
Pilar.....	26° 37'	09"	58° 22'	35"	268
Villa Franca..	26° 18'	41"	<i>No observ.</i>		...
Villa Villeta..	25° 29'	29"	57° 37'	42"	...
Asuncion.....	25° 16'	29.7	57° 42'	42"	*307
Villa Rica.....	25° 47'	10"	56° 30'	20"	†...
Concepcion....	23° 23'	56"	57° 30'	59"	330
Salvador.....	22° 48'	45"	57° 52'	12"	333
Pan de Azucar.	21° 25'	10"	57° 58'	54"	‡340
Olimpo (Ft. Bourbon)	21° 01'	39"	57° 55'	40"	366
Salinas.....	20° 36'	24"	58° 05'	59"	...
Coimbra	19° 55'	43"	57° 52'	34"	383
Albuquerque..	19° 26'	53"	57° 28'	31"	390
Corumba.....	18° 59'	43"	57° 44'	36"	396

* The city is 63 feet higher than the river.

† An interior town—323 feet above Asuncion.

‡ Summit 1,355 feet.

DEPARTMENT OF STATISTICS.

NEW YORK STATE CENSUS, 1855.*

The completion of the State census of 1855, affords an opportunity for noticing some of the prominent results that may be drawn from its summaries, and comparing these with former enumerations, with the view of illustrating the progress of our development, and the comparative growth of the city and State of New York between different periods.

An equal distribution of representative power can only be ascertained and preserved by careful and repeated summaries of our numbers, and these have become equally necessary in an intelligent administration of public affairs, and the multiplied details of government.

Nor are the fruits of the census less useful to the private than the public interests of society. The merchant, the manufacturer, and the projector of new lines of communication or new schemes of commercial or financial enterprise, not less than the philanthropist, the politician, and the statesman, seek in its columns for the numbers, the character, the origin and the condition of the population embraced within their several fields of operation.

The interest which these enumerations awaken, is not limited to the period that produced them, nor their utility to the illustration of the existing conditions of the country to which they relate. When their occasion for present use has been superseded by newer summaries, they become valuable *landmarks*, by which to measure the progress of the community in numbers and resources; the *data* by which to compute the influences of moral, political and social causes upon the body politic; the *elements* from which the historian derives his facts concerning the upward and progressive, or perchance the declining fortunes of the nation.

Although the occasion of obtaining a census

has been seized as a favorable opportunity for procuring a multitude of facts relating to agriculture, and various statistics of an educational, religious and literary character, still the primary and prominent end of its inquiries is, to develop the individual and social condition of man; to penetrate into his most intimate social relations, and discover the organic elements of the civil economy.

In private life, it takes him at the first day of his existence, adds him to the general number of births, and retains him perhaps three-fourths of a century in its columns. It reckons him a dozen years at school, and perhaps records him among the marriages. It makes him figure in the classification of the varied professions and occupations of life, or assigns him a place among the civil or official stations of the country; or it may be, unfortunately, in the statistics of asylums or prisons; and at length, after figuring many times in the drama of life, it takes a final estimate of him in the column of deaths!

In the course of life, how much of good or evil to the general well-being may have depended upon this unit of the population! At the tribunal, on the jury, at the elections, in the legislative assembly, he may have represented a decision, a verdict, a vote, upon which, perhaps, hung the balance of justice, or the destinies of the State!

His industry or wealth became the source of numbers which expressed agricultural or industrial production, and all the interests which accompany their fortune. If unfortunate, and needing the aid of public charities, the census kindly directed attention to his necessities, and enabled the government to proportion its charities to the demands actually existing upon them.

Although for many centuries, among Egyptians, Greeks and Romans, enumerations, corresponding with our census, were employed to second the wonderful development of civilization and art to which these nations attained, the application of statistics, like that of kindred sciences, was lost during the middle ages.

* * Results of the New York State Census of 1855; and the comparative growth of the City and State of New York between different periods"—a paper read before the American Geographical and Statistical Society, by Franklin B. Hough, Esq., M. D., of Albany, 2d July, 1857.

After the revival of learning, this science long remained purely speculative, and unapplied to public affairs; rejected by the people as a fiscal invention for more thoroughly exhausting their slender resources, or as a contrivance for further facilitating military conscriptions—and shunned by princes, as divulging the secrets of their government, or perhaps betraying their weakness to the calculating and aggressive cupidity of some neighboring rival power.

The want of data for an intelligent administration of the affairs of her American Colonies, led the English Government, at an early period, and from time to time, to direct an enumeration of their inhabitants; and we have, during the last century, a better knowledge of our population than that of England herself during the same period.

The first State Constitution, adopted in 1777, provided for a septennial census of electors, as the basis of representation in the Legislature; and this, with the period changed to ten years, and extended to embrace the total population, has been continued till the present time, affording, it is believed, the first instance in which a regular enumeration, at *fixed intervals*, was ever instituted.

In preparing the Federal Constitution in 1787, a similar provision was inserted; and not until two enumerations had been made by the United States, did Great Britain and France apply the census to their own dominions.*

From 1698 to 1855, there were taken by authority of Government, thirty separate enumerations, of which all but three exhibit more or less detail concerning each county.

For convenience, I will arrange these in groups, and notice the prominent results of the censuses of the English colonial period, those of the Revolution and until the adoption of the Federal Constitution, the several summaries of electors under the first State Constitution, and the various national and State enumerations, with intervals of ten years.

* The census of Great Britain has been published at intervals of ten years, commencing with 1801, and that of France once in five years from the same date.

Under the English government, a census was taken in each of the years 1698, 1703, 1723, 1731, 1737, 1746, 1749, 1756 and 1771. Partial enumerations of 1688, 1712 and 1714, are also preserved. All of these admit of classification into whites and blacks, the latter usually specified as *slaves*, and (excepting the first) into male and female, adults and children. In 1731 and 1737, the numbers of each class under and above the age of ten years were specified, and after that period, the years 16 and 60 were used to divide the ages of the population.

These censuses, following at intervals of 5, 20, 8, 6, 9, 3, 7 and 15 years, and extending through about three-fourths of a century, indicate an increase of population in the colony from 18,067 to 163,337, and of the city of New from 4,937 to 21,862 souls.

The general results of each were as follows:

1.—Absolute Population.					
Years.	White.		Black.		Total.
	Males.	Females.	Males.	Females.	
1698....	8,143	7,754	2,170		18,067
1703....	9,322	9,085	1,174	1,084	20,665
1723....	17,583	16,810	3,364	2,807	40,564
1731....	24,856	18,205	4,866	2,897	50,824
1737....	25,740	25,756	4,948	3,993	60,437
1746....	26,860	25,622	4,857	4,250	61,589
1749....	32,355	30,401	5,696	4,896	73,348
1756....	43,261	39,981	7,570	5,978	96,790
1771....	73,990	69,484	10,623	9,240	163,337

2.—Absolute and Annual Increase.				
Years.	Absolute Increase.	Ratio of An. ratio	Increase. of Incr.	
1698-1703....	5 years.	2,598	14.4	2.87
1703-23.....	20 "	19,899	96.3	4.81
1723-31.....	8 "	10,260	25.3	3.16
1731-37.....	6 "	9,613	19.8	3.15
1737-46.....	9 "	1,152	1.9	0.21
1746-49.....	3 "	11,759	19.1	6.36
1749-56.....	7 "	23,442	31.9	4.57
1756-71.....	15 "	66,547	68.8	4.59

3.—Proportion of Colors and Sexes.				
Years.	White.	Black.	Male.	Female.
1698.....	88.0	12.0	51.1	48.9
1703.....	89.0	11.0	50.8	49.2
1723.....	84.8	15.2	51.7	48.3
1731.....	84.7	15.3	58.4	41.6
1737.....	85.2	14.8	50.8	49.2
1746.....	85.2	14.8	51.5	48.5
1749.....	85.5	14.5	51.9	48.1
1756.....	86.0	14.0	52.5	47.5
1771.....	87.8	12.2	51.8	48.2

A comparison of these numbers will show an excess of males over females, of about $7\frac{1}{2}$ per cent., a feature noticed in all new countries, and of which further remarks will be made.

The relative per centages of whites and blacks were, at the last of these periods, very nearly that of the first, having in the interval deviated but about 3 per cent. By far the greatest positive increase occurred between 1757 and 1771. The reasons assigned by the governor for this growth were, the high price of labor, and abundance and cheapness of land for cultivation, which, by increasing the means of subsistence, afforded strong additional incitements to early marriages. The proportion of the births to the population was said to much exceed that in Europe, and it was computed that the colonies doubled their inhabitants by natural increase in twenty years.

In addition to the causes thus cited, a very prominent source of prosperity was derived from the conquest of Canada in 1760, which, by removing all apprehension of Indian hostilities, allowed the frontiers to expand without obstruction, and induced large immigrations for the settlement of the immense grants of land which were made during this period. Many of these grants were conditioned to their occupation by a certain number of families within a limited term of years, which led to energetic measures for their settlement.

In 1774, it was estimated that the colony of New York embraced a population of 161,098 whites, and 21,149 blacks.

The emergencies of the Revolution led to the ordering of two enumerations of the inhabitants of the several colonies, with the view of ascertaining the quotas of men and means due from each. These were taken in 1776 and 1782, but of neither have we more than fragments.

In 1786, a full census of New York was taken, by virtue of a provision in the Articles of Confederation, which gave a total of 238,897 to the State, and 23,614 to the city of New York. Of these, there were in the State 219,956 whites, and 18,929 slaves.

Under the first State Constitution, a census was taken in each of the years 1790, 1795, 1801, 1807, 1814 and 1821, embracing the several classes of electors. That of 1814 also included

a few statistics of the total population, and that of 1821, the prominent results of agriculture and domestic manufactures. The results of these enumerations, so far as they relate to the whole State, and to the city of New York, were as follows:

1.—City Electors.

Years.	Worth £100.	Worth £20 to £100.	Renting Real estate worth 40s. per an.	Total.
1790.....	1,209	1,221	2,661	5,181
1795.....	2,144	10	4,948	7,202
1801.....	2,332	19	5,698	8,088
1807.....	3,000	20	9,334	12,416
1814.....	3,141	17	10,763	13,941
1821.....	3,881	17	12,761	16,659

2.—State Electors.

Years.	Worth £100.	Worth £20 to £100.	Renting Real estate worth 40s. per an.	Total.
1790.....	19,369	23,425	14,674	57,606
1795.....	36,338	9,838	22,598	64,017
1801.....	52,058	5,264	28,522	85,907
1807.....	71,159	5,800	44,330	121,289
1814.....	87,491	5,231	59,104	151,846
1821.....	100,490	8,985	93,035	202,510

The Federal Government has furnished us with seven decennial enumerations, beginning with 1790, and under the late and present Constitutions, a census is required to be taken at like intervals, but in years intermediate with the former. We have thus a summary of our population and statistics, at intervals of five years.

Time will not permit me to notice the progressive development of these systems of enumeration from the first of the series, which included but five particulars, down to the one whose results are about being submitted to the public, and whose details extend to several hundred specific points of statistical inquiry.

Like many other departments of human knowledge, that of statistics applied to the population and resources of the country, has not been uniformly progressive, and more than once have inquiries been directed to subjects whose results scarcely admitted of profitable generalization when obtained, and whose places might better have been occupied by other inquiries, more directly related to the existing conditions of society. These imperfections have

suggested their remedy in the next, and thus each succeeding census has been, or should have been, benefitted by the experience of the past.

Such has now been the number and extent of these researches in the several States and cities of the Union, that the united consultation of those who have directed their classification, would probably develop a system as nearly perfect as the nature of our institutions and circumstances will admit.

Absolute precision in a census would require that no changes should occur while the enumeration was being made, or that it should be as nearly instantaneous as possible, that the persons employed upon the task should be equally competent and zealous, with precisely similar views of their duty in all things, and that the people at large be uniformly intelligent with regard to the various subjects embraced in the inquiries, and disposed to render a full and correct account of each.

Until these can be realized, the census, upon some points, and particularly upon industrial statistics—the best that can be obtained differing widely from the truth in individual cases, but again nearly approaching it in the general average, and comparable in the same census between different sections of the country, and with different periods upon the same subjects.

In stating the leading results of the recent census, I propose to trace the actual as well as the relative changes which each subject of inquiry concerning population has undergone since 1790, or since first reported, so far as relates to the State of New York and its metropolis—occasionally comparing the growth of the State with the Union, and the city of New York with other cities.

Total Population.—During 65 years the State of New York has increased ten-fold, and the city twenty-fold upon their numbers at the beginning of the period. In the one case, the movement was from 340,120 to 3,466,212, and as relates to the city, from 31,131 to 620,810.

The numbers upon which this assertion is founded are contained in the following table:

Years.	City.		State.	
	Total No.	Increase.	Total No.	Increase.
1790.....	33,131	.....	340,120	.....
1800.....	60,489	27,358	596,756	246,636
1810.....	96,373	35,889	959,049	372,293
1814.....	95,519	Deer., 854	1,035,910	76,861
1820.....	123,706	28,187	1,372,812	336,902
1825.....	166,086	42,380	1,616,458	243,696
1830.....	197,112	31,026	1,918,608	302,150
1835.....	268,089	70,977	2,174,517	255,909
1840.....	312,210	44,621	2,428,921	254,404
1845.....	371,223	58,513	2,604,495	175,574
1850.....	515,547	144,324	2,097,394	492,899
1855.....	629,810	114,263	3,466,212	368,818

In 1850, the United States had increased about six-fold upon the population of 1790.

In comparing the relative growth of districts whose actual numbers are widely different, there is sometimes a difficulty in clearly comprehending their true relations, from the inequality of the numerals which represent them. To obviate this, I will present a table in which are given the number of inhabitants at each period, as compared to every 1,000 now living. In cases where the intervals between the enumerations were different, the increase is assumed to be uniform between each.

COMPARATIVE GROWTH OF CITIES AND COUNTRIES.

1.—Growth of Countries.

Years.	N. York	United States.	England & Wales.	Scot-land.	Great Britain.	Fr'ce.
1790.....	96	149	.....	.....	.....	.....
1800.....	169	202	.....	.....	.....	.....
1810.....	277	274	536	596	566	818
1814.....	298	312	586	645	603	838
1820.....	394	369	637	688	658	544
1825.....	467	429	684	243	708	869
1830.....	556	489	732	798	758	898
1835.....	627	569	784	840	810	926
1840.....	701	649	836	883	863	947
1845.....	751	765	891	928	905	976
1850.....	860	881	946	973	947	992
1855.....	1,000	1,000	1,000	1,000	1,000	1,000

2.—Growth of Cities.

Years.	New York.	Brooklyn.	Buffalo.	Boston.	Paris.	London.
1790.....	52	10	.....	99	.....	.....
1800.....	96	14	.....	155	.....	.....
1810.....	156	25	.....	210	576	488
1814.....	151	32	.....	233	595	507
1820.....	196	39	28	269	638	536
1825.....	263	57	69	363	711	594
1830.....	328	82	118	382	734	653
1835.....	425	119	265	489	758	706
1840.....	496	176	245	529	883	759
1845.....	589	250	401	712	979	838
1850.....	818	471	589	852	1,090	918
1855.....	1,000	1,000	1,000	1,000	1,000	1,000

These relations are eminently adapted to exhibition by graphic delineation. It is to be remarked, that the increase of population in agricultural districts has a limit which is soon reached, and the surplus of increase by births must seek other pursuits for profitable employment, or new countries if they would cultivate the soil. Several of the interior and western counties of the State increased very rapidly during the first twenty or thirty years of their settlement, but during as many of their later years have shown but little growth. For example: In Tompkins county, to every 1,000 persons now living, there were in 1800, 23; in 1810, 164; in 1819, 311; in 1820, 703; in 1825, 887; in 1830, 994; in 1835, 1,023; in 1840, 1,024; in 1845, 1,024; and in 1850, 1,037. The rapid increase of this county before 1825, and its almost stationary condition since, presents a remarkable contrast with King's County, which has acquired nearly two-thirds of its population within the last ten years!

While agriculture may have its limit for the employment of human labor, manufactures and commerce present a wide and diversified field of enterprise, opening out into a multitude of inviting avenues to wealth and distinction, promising unlimited success as the certain reward of sagacity and application in business, and affording to the multitudes who seek employment in their various departments of industry, a comfortable subsistence, and, to a certain extent, success according to merit.

Wherever natural advantages or artificial lines of communication may render manufactures or commerce profitable, we may expect to find communities whose growth and prosperity are bounded only by the limit which they may themselves assign to their own operations, or the general prosperity of the nation to whose wants they minister.

It is not my purpose to analyze the causes which promote this centralization of our population, or to consider the relative or combined influences of canals, railroads or steam power in producing it.

Neither does it come within my province to

notice the natural advantages which have contributed to make this city the commercial emporium and financial center of the Union.

The extraordinary growth which we have witnessed during the last ten years, and which have raised the population of New York and its immediate dependencies to over a million in number; the influences which its wealth, its institutions, and its press exert upon the nation at large, are but the beginnings of other and still mightier influences, which it is destined to exert upon the fortunes of the general commonwealth.

Classification by Sexes.—Each census of this State, previous to 1855, has shown an excess of males. The national census has uniformly shown more males than females in the general average, and in all of the States with the following exception: in Connecticut, Massachusetts and Rhode Island, the females have uniformly outnumbered the males. In New Hampshire since 1790, in North Carolina since 1820, in Vermont in 1820, in Delaware in 1840, and in the District of Columbia since 1810, the same has been observed.

In general, the excess of males is greatest in newly settled States, where the population is made up of emigrants from older States or foreign countries, among whom the male sex uniformly predominates.*

As emigration ceases, and the surplus of natural increase is forced to seek other quarters, the disproportion of the sexes is reversed, and we find—as in most European countries—in New England, and now in this State, a greater number of females.

It is generally conceded that there are born more males than females. The extent of this difference in our State remains to be ascertained by a careful system of registration of births.

The relative proportion of the sexes is also observed to vary between different ages. Be-

* The census of Wisconsin in 1855 gave a proportion of about 85 females to every 100 males. The general summary of immigrants into the United States during 35½ years preceding Dec. 31, 1855, gave a proportion of 158 males to 100 females.—(*Brownell's Hist. of Immigration*, p. 175.)

fore the age of 15, we have more males. Between 15 and 30 we notice a marked excess of females—doubtless owing to the greater number of young men who seek employment or homes in the West. Above the age of 30, the proportions change within moderate limits, until the age of 70, above which the chance of life appears to be greater with the female. Of 91 persons reported in 1855 as 100 years of age or upwards, 41 were males, and 50 females.

The following table exhibits the number of males and females in the city and State of New York, between different ages, as shown by the census of 1855:

Ages.	City of New York.		State of New York.	
	Males.	Females.	Males.	Females.
Under 1.....	10,776	11,335	51,440	51,082
1 and under 5..	32,824	32,643	186,368	182,729
5 " 10..	30,287	30,001	198,742	195,639
10 " 15..	28,100	28,239	189,293	185,252
15 " 20..	27,038	34,796	170,015	188,927
20 " 25..	32,940	46,021	168,114	195,100
25 " 30..	36,173	41,418	158,547	166,530
30 " 35..	32,362	30,557	140,355	134,234
35 " 40..	21,992	19,923	111,489	103,409
40 " 45..	18,016	16,789	93,297	86,960
45 " 50..	11,018	10,241	72,949	65,453
50 " 60..	13,319	13,973	100,985	95,817
60 " 70..	5,361	7,194	53,825	54,215
70 " 80..	1,534	2,348	22,462	22,555
80 " 90..	345	607	5,919	6,339
90 " 100..	49	89	702	847
100 and over....	...	10	41	50

Ages unknown 1,684 in the city, and 6,532 in the State of New York.

The census shows a relatively greater number of females in New York county than in any other in the State, except King's—the proportion being 48.1 males to 51.9 females. This inequality is observed in other large cities, and in London the difference is still greater, being 46.8 males to 53.2 females. This disproportion of numbers in large cities has its exceptions. Paris, since 1836, has returned an excess of males, which is explained in the official report, by the large number of young men attracted thither to its seminaries of learning, the crowd of unmarried artificers drawn from the departments, and even from foreign countries, and the numerous male laborers upon public and private works.

Classification by Ages.—The ages when capable of military service with males, and the pro-

ductive period with females, were the original and for a long time the only divisions which the census recognized. The ages of 10, 14, 16, 18, 21, 24, 26, 36, 45, 55 and 60, have been at different times employed in our State. The national census of 1830, 1840 and 1850 adopted periods of 5 to 20, and of 10 years above that age. In the census of 1850, the specific age of each person was required to be reported, thus affording the opportunity for adopting any arrangement that might be desired, even to that of single years. A careful examination of the census reports of Belgium and France, in which the classification by single years had been employed, clearly revealed the tendency which doubtless prevails in all countries, to report the nearest round number instead of the precise year. For example, there were reported in France, in 1851—578,956 as 19 years of age, 618,230 as 20, 555,893 as 21, 495,711 as 29, 690,638 as 30, 467,219 as 31, 420,327 as 39, 665,939 as 40, 401,550 as 41. Thus, instead of descending in a somewhat uniform grade, as would be the case if the existing ages of the whole nation were truly reported, a curve representing the ages would be full of irregularities; yet even in these deviations from truth, there may be traced a symmetry, and the line that would represent the years from 20 to 30, would in a measure correspond in its inflections with that from 30 to 40. It was further found that a mean of five years would correct the inequalities of single years, and produce a series of numbers very nearly regular in their descent, and probably much nearer the existing ages than those derived from single years. The ages of the population were accordingly divided into groups of five years, between 1 and 50, and of ten years above the latter.

The extreme period of life reported in the late census was 120 years. It is to be observed that much doubt attaches to these cases of extreme longevity. In several instances, the Marshals accompanied their reports with dates and particulars which left no doubt concerning their accuracy.

Place of Birth.—The census of 1845 first directed inquiries concerning place of birth, which were of a very general character, and gave in our State a total of 84.8 per cent. native, and 15.2 per cent. of foreign birth. In 1850 the proportions had changed to 78.5 per cent. of the former, and 21.5 per cent. of the latter.

The census of 1855 gave, opposite the name of each person, his county, if in New York; or State or Territory, if in the United States, or foreign country, if abroad. In classifying these returns, we have deemed it proper to give them all the detail which they admitted, as well to show by its origin the general character of our population, as to afford a full and ample means for future comparison. Emigrants settling in numbers together, retain their local peculiarities of language and customs, and we often see re-produced in our State in miniature, the habits, manners, and tone of moral or religious sentiment which characterize the section of Europe, or of New England, where the population of the community may have originated. The concentration of our people in cities and large towns, adds additional interest to this inquiry, by showing the course of the migration which is constantly going on, and the directions which the human current takes in its unceasing fluctuations.

As a class, our people are migratory. Of the heads of families, how few reside in the place where they were born. In this respect, we offer a wide contrast with some portions of Europe.

The tendency of our emigration is *westward*. If proof were required to substantiate the motto,

"Westward the Star of Empire takes its way,"

let the population of two of our Northern States differing considerably in longitude, be compared. The federal census of 1850 supplies ample data to show the number of those born in Wisconsin, now living in Connecticut, and the reverse; and so on with the other States of the Union. In like manner the present census affords the same facts, though on a smaller

scale, in the statistics of its east and west wide-apart countries.

For example, among the transpositions by migration, there are reported:

In Steuben, born in Otsego.....	1,173
In Otsego, born in Steuben.....	23
In Livingston, born in Washington.....	1,502
In Washington, born in Livingston.....	8
In Jefferson, born in Montgomery.....	1,502
In Montgomery, born in Jefferson.....	55

The following table exhibits the comparative origin of population in the City and State of New York:

Place of Birth.	City	State	Place of B'th.	City	State of
<i>Counties of</i>	<i>of N.</i>	<i>of N.</i>	<i>Counties of</i>	<i>of N.</i>	<i>New</i>
<i>New York.</i>	<i>York.</i>	<i>York.</i>	<i>N. York.</i>	<i>York.</i>	<i>York.</i>
Albany ..	2,158	76,337	Suffolk ..	1,248	36,090
Allegany ..	27	22,516	Sullivan ..	178	17,427
Broome ..	66	21,057	Tioga ..	37	15,915
Cattaraugus ..	16	19,315	Tompkins ..	114	28,089
Cayuga ..	146	38,759	Ulster ..	1,309	55,752
Chaut'que ..	43	27,349	Warren ..	38	14,329
Chemung ..	26	15,347	Wash't'n ..	401	44,925
Chenango ..	89	34,940	Wayne ..	64	26,646
Clinton ..	55	26,619	W'ch'ter ..	4,825	50,896
Columbia ..	1,035	49,347	Wyoming ..	17	18,022
Cortland ..	56	19,118	Yates ..	28	15,220
Delaware ..	526	37,315	<i>States:</i>		
Dutchess ..	2,753	67,804	Maine ..	1,380	5,818
Erie	203	55,597	N. H.	1,001	14,941
Essex	76	20,069	Vermont ..	1,278	54,266
Franklin ..	22	14,426	Mass ..	6,205	57,086
Fulton ..	50	16,942	R. Island ..	873	11,737
Genesee ..	83	19,023	Conn ..	7,239	63,691
Greene ..	594	32,849	N. York ..	262,156	2,222,321
Hamilton ..	7	1,834	N. Jersey ..	12,259	40,391
Herkimer ..	131	41,663	Penn ..	4,949	31,472
Jefferson ..	135	47,178	Del.	53	224
Kings	2,556	56,919	Md	1,793	2,568
Lewis	24	16,133	D. of Col. ..	231	2,187
Livingst'n ..	40	23,679	Va	1,377	2,158
Madison ..	95	35,333	N. C.	251	792
Monroe ..	162	46,244	S. C.	493	903
Montgomery ..	249	39,724	Georgia ..	329	672
New York ..	232,151	297,164	Florida ..	53	189
Niagara ..	35	20,095	Ala.	98	208
Oneida ..	600	70,365	Miss	43	163
Onondaga ..	160	53,590	La	332	695
Ontario ..	141	30,214	Texas ..	43	96
Orange ..	3,176	56,472	Ark.	5	29
Orleans ..	22	13,578	Mo	99	307
Oswego ..	158	34,478	Kenn	50	185
Otsego ..	162	50,967	Ty	162	545
Putnam ..	589	14,477	Ohio	575	5,256
Queens ..	1,616	33,924	Indiana ..	63	606
Renssela'r ..	973	63,787	Illinois ..	99	1,255
Richmond ..	753	12,821	Mich	141	3,413
Rockland ..	1,029	13,839	Wis	56	1,163
St. Lawr ..	65	43,586	Iowa	9	106
Saratoga ..	365	44,620	Cal.	22	51
Schenec'y ..	172	16,332	Territ'es ..	4	26
Schoharie ..	169	37,797	U. States ..	303,721	2,528,444
Schuyler ..	4	6,325	<i>Foreign Countries:</i>		
Seneca	75	19,926	Canada ..	2,040	47,842
Steuben ..	55	38,785	N. Bruns ..	234	766

Place of Birth.	City of N. York.	State of N. York.	Place of Birth.	City of N. York.	State of N. York.	Countries.	No.	P. cent.	No.	P. cent.
<i>Foreign Countries.</i>			<i>Foreign Countries.</i>			Spain.....	11,251	0.267	583	0.017
N. Scotia	551	1,602	Spain...	343	570	Norway.....	†	....	570	0.017
Newfld'd	133	398	Portugal	163	291	Belgium.....	6,991	0.166	454	0.013
W. Indies	1,121	1,846	Poland..	1,200	1,880	Newfoundland	†	....	398	0.011
Mexico...	66	119	Norway..	227	537	South America	5,440	0.129	296	0.008
S. Amer..	170	296	Sweden..	554	1,472	Portugal.....	6,049	0.194	291	0.003
England.	22,713	102,286	Russia..	116	256	Russia.....	938	0.022	256	0.008
Scotland.	8,487	27,523	Denmark	327	583	Mexico.....	15,969	0.379	119	0.007
Ireland.	175,735	469,753	E. Indies	43	104					
Wales ..	935	8,557	Africa ..	38	76					
France ..	6,321	18,366	Turkey ..							
Belgium.	174	454	& Greece	40	48					
Holland.	756	4,214	Islands of							
Germany	95,986	4,214	the Sea	62	159					
Prussia ..	1,586	6,352	Asia....	64	162					
Austria ..	331	1,197	At Sea...	103	511					
Switz'l'd	978	3,948	Unknown	3,620	17,238					
Italy ...	968	1,231								

These numbers may be reduced to the following generalization for the whole State:

	Number.	Per ct.
Born in New York	2,222,321	64.077
" New England.....	207,539	6.014
" N. Jersey and Pennsylvania	71,863	2.071
" Southern States	13,124	0.378
" Western States.....	11,876	0.340
" United States	2,528,444	72.903
" Foreign countries	922,019	26.585
" At sea, and unknown	17,749	0.512

The relative numbers of our population born in foreign countries having over 100 emigrants in the State, compared to the total immigration into the United States during 36½ years, are as follows:

Countries in the order of their emigrants in N.Y.	Immigration into U. S. in 36½ years.	Residing in New York, June 1, '55.
	No. P. cent.	No. P. cent.
Ireland	*747,930 17.754	469,753 13.549
Germany	1,206,087 28.630	218,997 6.314
England	*207,492 4.925	102,286 2.949
Canada	†91,699 2.177	47,842 1.379
Scotland	*34,559 0.820	27,523 0.794
France	188,725 4.482	18,366 0.529
Wales	4,782 0.114	8,557 0.246
Prussia	35,995 0.854	6,352 0.183
Holland	17,283 0.417	4,214 0.124
Switzerland	31,725 0.735	3,948 0.114
Poland	1,318 0.031	1,880 0.054
West Indies.....	35,317 0.838	1,846 0.053
Nova Scotia...	†	....
Sweden	†29,441 0.694	1,602 0.046
Italy	7,185 0.171	1,472 0.042
Austria	‡	1,231 0.036
New Brunswick	†	1,197 0.034
Denmark	3,059 0.073	766 0.022

* In addition to the foregoing, 1,346,682, or 32.015 per cent. were born in Great Britain—the divisions not specified.

† British America, the provinces not specified.

‡ Sweden and Norway reported together.

§ Included in Germany.

The question of origin would have been enhanced in interest by an inquiry into the nativity of the immediate ancestors of persons born in the United States. There are few persons of this class who cannot assign an English, Scotch, Irish, German, Dutch, French, or other foreign origin to their forefathers; and the facts which such an inquiry would elicit, might prove interesting in the study of the American character, made up as it is of the intimate and harmonious blending of whatever may be energetic and enterprising, or liberal and independent in these various elements.

Civil Condition.—The census of 1855 is the first that affords data for comparison of the number of single, married and widowed in our population. The general per centages of these were: single, 60.08; married, 36.15; and widowed, 3.77, namely: widowers, 1.02, and widows, 2.75.

In the city of New York, the per centages of these classes were: single, 60.92; married, 34.41; and widowed 4.67, namely: widowers, 1.04, and widows, 3.63.

It is obvious that the proportions of these classes have an intimate relation to the welfare of society, and that an excess of single or of widowed alike indicate conditions which, if continued, must prove disastrous to the body politic.

Celibacy is usually increased by inordinate prices in the necessities of life, rendering the support of families difficult, or by a relaxation of morals like that oftener noticed among the nobility and the aristocratic classes of Europe; while an excess of widow-hood has, from time immemorial, been associated with wars, pestilence and famine.

† British America, the provinces not specified.

‡ Sweden and Norway reported together.

The following comparison with other countries will add interest to this subject:

PER CENTAGES OF THE VARIOUS CIVIL CONDITIONS.

Countries.	Years.	Single.	Mar-ried.	Wid-ows.	Wid-ows.
N. Y. State, all classes..	1855	60.08	36.15	1.02	2.75
Canada ..	1851	66.66	30.81	0.94	1.59
England ..	1821	60.00	33.00	...	...
Eng. & Wales, males...	1851	62.50	33.69	3.80	...
" females ..	1851	59.79	32.97	...	7.24
Scotland, males	1851	66.77	29.83	3.40	...
" females ..	1851	63.71	27.91	...	8.38
Isles of Brit. Seas, males.	1851	63.12	33.44	3.44	...
" fem's ..	1851	60.97	30.93	...	9.06
Great Britain, males...	1851	63.08	33.17	3.75	...
" females ..	1851	60.35	32.24	...	7.41
Belgium, all classes...	1846	63.91	30.49	1.97	3.63
France, males	1851	56.04	39.26	4.70	...
" females ..	1851	51.99	38.63	...	9.38
Denmark, all classes...	1834	62.00	33.00	...	6.4
Spain	1803	55.00	38.00	...	6.9
Sweden and Finland ..	1809	50.00	34.00	...	6.1
Switzerland	1827	56.00	35.00	...	7.8

It is generally observed, that the number of widows is about twice as great as that of widowers. The returns of marriages relieve the subject of mystery, by exhibiting a correspondingly greater number of widowers united to previously unmarried females.

Of 21,551 marriages reported as occurring in the State during the year preceding June 1st, 1855, the previous civil condition was as follows:

	Numbers.	Per ct.
Single males to single females	17,935	83.2
" to widows	565	2.7
Widowers to single females	2,067	9.7
" to widows	927	4.4

Although the actual numbers here given are manifestly below the truth, it is not probable that the per centages would have been materially varied by the correct return of every marriage; but in saying this we do not wish to advocate either incompleteness or error in documents which ought to be without fault.

Professions and Occupations.—These being specifically required of each adult male above the age of 15 years, and of females having a regular employment other than the ordinary duties of the household, have been classified alphabetically by counties, with such detail as they appeared to require. The following is a list of those reported in the State as giving

employment to 1,000 or more persons, in the order of their numbers in the State:

Professions City and Occu- pations.	City of N. York.	State of N. York.
Farmers ..	193	321,930
Laborers ..	19,748	115,800
Servants ..	31,749	58,441
Carpenters ..	7,901	37,475
Clerks, copy-ists and acc'tants.	13,897	30,359
Tailors ..	12,609	29,236
Boot & shoe-makers ..	6,745	24,804
Merchants ..	6,001	20,664
Blacksmiths ..	2,611	16,948
Dressmakers and seam-stresses ..	7,436	16,939
Masons, plas-terers and b'klayers.	3,634	13,781
Painters, varnishers & glaziers.	3,400	10,081
Teachers ..	1,268	9,959
Sailors and marines ..	4,714	9,720
Boatmen and watermen.	1,004	9,136
Grocers ..	4,079	9,056
Coopers ..	1,018	7,539
Carters and draymen.	5,338	7,350
Cabinet ma-kers ..	2,606	6,656
Machinists ..	1,714	6,309
Butchers ..	2,643	6,308
Physicians ..	1,252	6,010
Milliners ..	1,585	5,862
Coach & wa-gon mak's ..	449	5,637
Bakers ..	2,856	5,135
Clergymen ..	393	4,810
Lawyers ..	1,112	4,542
Printers ..	1,401	4,339
Students ..	653	4,184
Peddlers ..	1,889	4,131
Stone and m'ble cut-ters & pol-ishers ..	1,755	4,076
Railroad em-ployees ..	523	4,006
Millers ..	130	3,917
Porters ..	3,052	3,916
Saddle, har-ness & tr'k makers ..	884	3,895
Mechanics (not other-wise speci-fied) ..	336	3,837
Hotel and innk'pers.	709	3,755
Tobacconists ..	996	3,744
Professions City and Occu- pations.	City of N. York.	State of N. York.
Sawyers ..	285	3,729
Ship carpen-ters ..	1,146	3,632
Laundresses ..	2,563	3,557
Tanners and curriers ..	228	3,416
Gardeners & florists ..	644	3,269
Joiners ..	303	3,256
Drivers ..	1,741	3,253
Engineers ..	867	3,180
Tinsmiths ..	897	3,160
Weavers ..	589	3,141
Moulders ..	593	3,114
Lumber men & dealers ..	156	2,933
Hat and cap makers ..	1,422	2,926
Teamsters ..	160	2,825
Factory op-eratives ..	207	2,477
Agents ..	935	2,340
Barbers ..	997	2,142
Bookbinders ..	1,315	2,121
Jewelers ..	1,099	2,055
Furnacemen ..	145	1,807
Boarding-ho-keepers ..	1,014	1,680
Dealers (not other-wise specified) ..	1,025	1,668
Brickmakers ..	38	1,627
Policemen ..	1,164	1,513
Wheelwrights ..	308	1,498
Manufact'ers (not other-wise speci-fied) ..	182	1,448
Apothecaries & druggists ..	521	1,438
Civil officers ..	316	1,427
Cooks ..	755	1,424
Apprentices ..	591	1,421
Millwrights ..	30	1,262
Brokers ..	649	1,233
Musicians ..	746	1,177
Brewers and distillers ..	360	1,176
Carvers and gilders ..	765	1,125
Storekeepers ..	837	1,120
Upholsterers ..	711	1,106
Confectioners ..	704	1,088
Clothiers ..	403	1,084
Builders ..	575	1,081
Piano makers ..	760	1,076
Dairymen & milkdealers ..	579	1,050
Quarrymen ..	52	1,031
Sash and blind makers ..	327	1,004

Each of our censuses is defective, in not exhibiting, in this connection, the number, of all ages and both sexes, dependent upon the different professions and occupations for support. At present, this is left to estimate and vague conjecture. A column should be provided for this in future enumerations.

Families and Dwellings.—The number of these, with the average number of persons in each in 1850 and 1855, compared with those of the United States (white and free colored) and Canada, were :

Year.	Dwellings.		Families.	
	Num-ber.	Pers- ons in each.	Num-ber.	Pers- ons in each.
N. Y. State...1850	473,936	6.53	566,869	5.46
N. Y. City ...1850	37,677	13.60	93,608	5.47
N. Y. State...1855	522,325	6.64	663,124	5.23
N. Y. City ...1855	42,668	14.79	126,558	4.97
United States...1850	3,362,337	5.94	3,593,195	5.55
Canada.....1851	.....	.....	293,667	6.27

The total value of dwellings was reported, in 1855, as \$273,481,811 in the city, and \$664,899,967 in the State of New York, being an average of \$6,409 in the former, and \$1,351 in the latter. It is to be remarked that the value of the lot was included with dwellings in cities and villages, but not upon farms.

Voters and Aliens.—These classes possess an inverse relation to each other, the per centage of one increasing as the other diminishes. Both are liable to vary with the definition given them by law, and the statutes of our State Government concerning the former, and of the Federal Government relating to the latter, have been repeatedly modified, since they have been made the subject of report in the census.

The elective franchise was extended by the State Constitution of 1821,* to all white male citizens of the age of 21 years, who paid taxes or performed military duty, or who were by law exempt from taxes or military service. In 1826 the Constitution was amended, by abolishing the property qualification of white voters altogether.†

* Article II, Section 1.

† The popular vote upon this extension of the elective franchise was 127,077 for, to 3,215 against it. Property qualification was continued as respects colored persons, in 1846, by a vote of 114,900 for, to 3,901 against retaining it.

The numbers and per centages of aliens and voters since 1821, have been, in the city and State of New York, as follows:

1.—Voters.*					
		Number.		Proportion.	
Years.		City.	State.	City.	State.
1825.....		18,283	296,132	11.00	18.31
1835.....		43,091	422,034	15.95	19.77
1845.....		63,927	539,379	17.22	20.71
1855.....		88,877	652,322	14.11	19.18

2.—Aliens.					
		Number.		Proportion.	
Years.		City.	State.	City.	State.
1825.....		18,856	40,430	11.33	2.44
1835.....		27,669	82,319	10.24	3.83
1845.....		60,946	153,717	16.14	7.52
1855.....		232,678	632,746	36.93	18.54

Students have usually been enumerated as in 1855, at the homes of their parents or guard-

* As the census of 1855 is the first that has been prepared in this State at a central office, under one supervision, a word of explanation is deemed proper with reference to these classes. In the schedules for obtaining this census, columns were provided for noting the voters and aliens, by a mark opposite the name. In condensing the returns, the age, sex, and place of birth were assumed as correct, and entries inconsistent with these were corrected to agree with them. The following were the principal errors committed by the marshals:—1. Persons under age, or females, marked in column of voters. 2. Natives of United States marked as aliens or naturalized voters. 3. Natives of foreign countries marked as native voters. 4. The head of the family marked as alien, and his wife and minor children of foreign birth not marked. 5. The head of the family marked as naturalized, and his wife and minor children of foreign birth as alien. Of these, No. 1 were stricken from the list of voters; of No. 2, the aliens were stricken out, and the naturalized voters carried to the column of native voters; No. 3 were carried to the column of naturalized voters; No. 4 were marked as all alien; and No. 5 were stricken from the column of aliens.

In other and less frequent cases, as that of children of citizens born in foreign countries, &c., such corrections were made as the definition of aliens and voters by existing statutes appeared to warrant.

In comparing the per centage of this class to the total population at different times, there will be observed an inequality and apparent inconsistency, which is not so much due to corresponding differences in number, as to imperfection of the returns, and the absence of system in reducing them to a general result. Judging from the original reports of the present census, there is no department of its inquiry in which there was more need of careful revision, or greater necessity for the application of uniform rules for its arrangement. By strictly applying the legal definitions to every case of manifest inconsistency and error, it is believed that the present census affords a very close approximation to the actual numbers of these classes at the date to which it refers.

ians, and not at the places of their temporary residence at an academy or college.

The numbers attending private, district, and the higher schools and seminaries of the State, were not reported in the present census, being considered as mostly shown in the reports of the Superintendent of Public Instruction, and the Regents of the University.

An inquiry was, however, instituted, with the view of ascertaining the number of students from other States attending colleges and professional schools in the State of New York, and those from New York attending in other States. The published catalogues of about 100 of these institutions, for the years 1854-'55, which were examined with the view of determining this point, gave the following results. They are somewhat imperfect, by not embracing all of these institutions in the Union, but the deficiency being chiefly in Southern and Western colleges, would not materially vary the relative numbers, as respects this State:

Number and Location of Colleges.	Total, except Preparatory	Professional and Scientific. From Departm't.	Under-graduates. New York.	From other States.	From New other States.
14 colleges in New England	3,190	67	678	354	2,032
15 coll. & professional schools in N. Y. .	2,182	509	351	992	330
3 coll. in N. Jersey	366	...	...	72	285
8 coll. & prof. schools in Penn.	1,794	17	1,010	10	722
37 coll. in Southern and S. Western States	4,850	7	1,381	9	3,355
23 coll. in Western States	2,089	36	822	34	1,178
Total	14,471	636	4,242	1,471	7,902
Percentage of prof. students from N. Y.				13.04	
" " from other States				86.96	
Percentage of undergraduates from N. Y.				15.69	
" " from other States				84.31	

Deaf and Dumb, Blind, Insane and Idiotic.—These classes have for many years been included in the census. There are apparently insurmountable difficulties attending the procuring of full and reliable statistics of some of these unfortunate classes, and especially of the latter. Their increase, according to the census, has borne no comparison with that of the total

population—an inference which no reason would justify, and which, of itself, would throw a doubt upon the correctness of these enumerations.

As there is a general agreement between each census upon this point, we may safely charge the fault upon the system, and seek other modes of obtaining full and official returns upon these subjects. Perhaps there could be found no better method than a concerted and systematic inquiry by resident physicians, having definite districts for examination, and furnished with uniform blanks and instructions for ascertaining the cause, duration, hereditary tendency, dependence upon public or private aid for support, and the various circumstances of their condition, which, by affording a knowledge of the *causes* of their maladies, lead to a reduction of their frequency.

The numbers of the total population to each one of these classes reported since 1825, were as follows:

State of N. Y.	Deaf and Dumb.	Blind.	Insane.	Idiotic.
1825	2,503	....	1,971	1,135
1835	2,331	2,446	2,249	1,464
1840	2,184	2,517	*1,036	*....
1845	2,407	2,969	1,201	1,755
1850	2,452	2,623	1,229	1,798
1855	2,431	3,051	1,264	1,972
United States.—Whites.				
1830	1,965	2,652	....	....
1840	2,124	2,825	969	....
1850	2,140	2,451	1,305	1,372

The numbers actually reported in the city and State of New York, have been as follows:

City of New York.*				
Years.	Deaf and Dumb.	Blind.	Insane.	Idiotic.
1825	56	...	193	46
1835	177	106	176	34
1840	250	144	201	..
1845	254	80	539	47
1855	411	316	655	52
State of New York.				
Years.	Deaf and Dumb.	Blind.	Insane.	Idiotic.
1825	645	....	819	1,421
1835	933	899	967	1,484
1840	1,112	965	2,340	....
1845	1,082	877	2,168	1,620
1855	1,422	1,136	2,742	1,812

* The inmates of special asylums were enumerated in the institutions where they were residing. This explains the disproportionately large number of some classes in the city of New York.

Owners of Land.—The number of all classes reported as holding land, by deed, contract or perpetual lease, was 361,013, or 10.41 per cent. of the total population. The number in New York city was 14,784, or 2.34 per cent. We have no data for comparison with other periods or other countries.

Adults unable to Read and Write.—We have three enumerations of these classes; those of 1840, 1850, and 1855, the ages in the two former being above 20, and in the latter above 21 years. The City and State of New York compare with each other and with the United States as follows:

Classes and Years.	Numbers.		
	City of N. Y.	State of N. Y.	United States.
Whites, 1840.....	7,775	44,452	549,693
Whites, 1850.....	17,140	91,293	962,898
Colored, 1850.....	1,667	7,429	90,522
Total, 1855.....	25,858	96,469	.....
Classes and Years.	Percentage to total of each class.		
	City of N. Y.	State of N. Y.	United States.
Whites, 1840.....	2.62	1.87	3.87
Whites, 1850.....	3.41	2.99	4.92
Colored, 1850.....	12.07	15.14	20.83
Total, 1855.....	4.10	2.78	.....

The greatest per centage of the illiterate was reported from Clinton County (10.47 per cent.), chiefly among the Canadian French settlers.

The nativities of those 21 years old and upwards unable to read and write, were as follows, as regards the City and State of New York:

Countries.	City of N. York.		State of N. York.	
	Males.	Females.	Males.	Females.
United States.....	1,108	955	12,128	8,667
Canada.....	25	28	4,541	3,272
England.....	97	162	1,526	949
Scotland.....	20	41	91	102
Ireland.....	6,383	14,995	23,644	35,941
France.....	43	56	305	297
Germany.....	597	856	1,805	2,202
Switzerland.....	3	6	39	37
Other European.....	260	223	473	397

Having now noticed the more prominent results of the census of 1855, with regard to the various classes of the population, and the deductions that may be drawn from a comparison of successive enumerations, I find it necessary to close without extending the subject to include statistics of marriages and deaths, agri-

culture, manufactures, religious societies, and the periodical press. The returns of some of these were much less reliable and satisfactory than those of the personal census—especially those concerning manufactures. Amidst the infinite diversity of details, and unlimited amount of combinations and varieties; in the absence of authentic and definite statements of the amount and value of raw materials and products; in the unwillingness frequently expressed to giving this key to prosperity or loss in business; in the constant recourse to memory for data, which, although offered with honest intentions, may differ widely from the true facts; and in the disposition, sometimes shown, to understate the results of the manufacture, with the view of avoiding taxation or rivalry on the one hand, or creating a fictitious credit or reputation by exaggerating the extent of their transactions on the other, we find abundant cause to doubt the precision with which these returns are made, and to question the soundness of positive deductions that may be drawn from them. The greatest difficulty in reducing these returns, is that of analyzing the results of several manufactures, carried on by the same person or company, and often so blended as to render separation impossible. A machine-shop may, for example, often comprise in one establishment departments elsewhere reported separately, as a furnace, brass-foundry, manufactory of agricultural implements, of steam engines, or of numerous other special machines or products, and an unlimited number of departments for the working of metals and wood. Perhaps no two of these establishments would compare with each other in the statistics of their business, and the correct analysis of any considerable number of large manufactories of this diversified class, would involve more time and attention than have often been allowed in the census.

Still, these results are useful for comparison with one another, and, in the aggregate, may prove approximately near the truth. By a careful study of the difficulties which attend this class of statistics, the ends to be gained,

the agencies to be employed, and the system of classification best adapted for representing the result to the greatest advantage, it is hoped that a plan may be formed for securing fully all the purposes to be desired from them.

POPULATION OF THE WORLD.

Petermann's Journal for January last contains a series of interesting chapters, prepared by Prof. C. F. W. Dieterici, Director of the Statistical Bureau of Prussia, and presented to the Berlin Academy of Sciences in March, 1858. In these the compiler promulgates an estimate of the present population of the world, which, from such a source, will be accepted by the statistician as a near approximation to accuracy. These are accompanied with a map of the world, exhibiting, by means of shadings, the density of the population in its several parts.

The Professor arranges his tabulations under three heads. The first of the series refers to simple enumerations in the several countries; the second divides the population by races, and the third arranges the whole in accordance with their religious affiliations.

According to the first of the serial tabulations, and omitting fractional numbers, the totals of the several grand divisions of the world sum up as follows:

	Square miles.*	Population.	Pop. to sq. m.
Europe	3,879,634	272,000,000	70.1
Asia	16,871,735	755,000,000	44.8
Africa	11,550,862	200,000,000	17.3
America	15,938,669	59,000,000	3.7
Australia	3,430,855	2,000,000	0.6
Antarctic Lands	45,520	.....	0.0
World	52,120,275	1,288,000,000	24.7

The greatest density of any country in Europe is found in Belgium, where it is 402 to the square mile. In some districts in England, however, it is much higher. In the county of Middlesex the density is 6,683, but this is exceptional, being the metropolitan county; and in Lancashire, the great center of manufactures,

* Reduced from German square miles—1=21½ English square miles

it is 1,064 to the square mile. In Asia, the densest population is in China Proper and in Northern India. Other parts of the world are comparatively destitute of population. In America the average is generally low, yet in certain districts may compare well with countries of moderate population.

The tabulations on the distribution of the population by races, are preceded by a sketch of Retzius' new craniological system, with its two grand divisions of oval heads (*dolico-cephalous*) and broad or cubic heads (*brachy-cephalous*). In the first are included all the Latin and German nations of Europe, 157,000,000; and in the latter the Slavic, Magyar, Turkish, and some of the Romance nations of the south. In Asia, the Chinese, Hindoos, Arian Persians, Arabs, Jews, and Tungusians, 610,000,000, are oval heads; and all other Asiatics are noted as broad heads. The estimate for America is based, of course, on aborigines only. All the rest are immigrants and their descendants, or more or less mixed. In regard to the American aborigines, the opinion is advanced, that from the islands around Behring's Strait, along the west coast to Cape Horn, the native population consists principally of broad heads; and that on the east coast, from Labrador downwards to the same southern extremity of the continent, the oval heads predominate. This would coincide with Humboldt's theory, that the west coast was peopled from Asia. In Australia, the broad and oval heads are probably evenly divided. The footing-up of the tables of this view of the subject is as follows:

	Oval Heads.	Broad Heads.
Europe	157,000,000	105,000,000
Asia	610,000,000	145,000,000
Africa	200,000,000	.....
America	58,000,000	1,000,000
Australia	1,000,000	1,000,000
Total	1,026,000,000	252,000,000

The same ethnological writer makes still another division of races according to facial angularity, into *orthognathes* and *prognathes*—the first having upright faces, and the latter protruding jaws and receding foreheads. Both

classes are found among the oval and broad heads, and are thus summed up:

	Upright Faces.	Receding Faces.
Europe	272,000,000	.....
Asia	224,000,000	531,000,000
Africa .....	.....	200,000,000
America	58,000,000	1,000,000
Australia	1,000,000	1,000,000
Total	555,000,000	733,000,000

The excess of the latter over the former is attributable to the population of Africa, which must be classed entirely with the receding-faced races, and this in spite of the anomaly of their being oval-headed.

The preceding strictly scientific classifications are followed by the classification as established by Blumenbach. The five classes into which the human race was divided by that physiologist, are distributed as follows:

1. CAUCASIAN (28.86 per cent.):	
In Europe (except Lapps and Finns) ..	270,000,000
In Asia (Turks, 15; Arabs, 5; Persians, etc., 11; Siberians (in part), 3; foreigners in Eastern Asia, 2) ..	36,000,000
In Africa (Arabs and foreigners) ..	4,000,000
In America (all except Indians) ..	58,000,000
In Australia (colonists) ..	1,000,000
Total Caucasian ..	369,000,000
2. MONGOLIAN (40.61 per cent.):	
In Asia principally; but in Europe the Lapps and Finns ..	522,000,000
3. ETHIOPIAN (15.08 per cent.) ..	196,000,000
4. AMERICAN (0.08 per cent.) ..	1,000,000
5. MALAY (15.38 per cent.):	
In Further India, 84; in the Indian Islands, 80; in Japan, 35; and in Australia, 1,000,000 ..	200,000,000
Grand total ..	1,288,000,000

The tabulation of the population (assuming the whole at 1,300,000,000), according to religions, is stated in the following scheme:

Christians (25.77 per cent.):	
Roman Catholics (50.7 p. c.) ..	170,000,000
Protestants (26.6 p. c.) ..	89,000,000
Greeks (22.7 p. c.) ..	76,000,000
.....	335,000,000
Jews (0.38 per cent.) ..	5,000,000
Asiatic religions (46.15 per cent.) ..	600,000,000
Mahomedans (12.31 per cent.) ..	160,000,000
Heathens (15.39 per cent.) ..	200,000,000
Assumed grand total ..	1,300,000,000

There can be no hesitation in accepting these results as approximative. The compiler is a

man of rare ability, and had every necessary material at hand to verify his estimates. Moreover he is a conscientious author, and can have had no motive to treat his subject otherwise than in a candid spirit of enquiry. His estimate for America, however, is evidently too low; and in another part of this number of the JOURNAL a more reliable statement is given. In the JOURNAL, No. 4, the population of Europe is shown to be 174,183,427, or 2,000,000 above the estimate of Dieterici. R. S. F.

EXTENT AND POPULATION OF AMERICA.

Latest Census Returns and Estimates.

I.—NORTH AMERICA.

Countries, etc.	Area, sq. m.	Pop., sq. m.
Greenland and Arctic Lands ..	1,000,000	.....
Danish settlements ..	3,952	9,892 2.5
Russian America ..	481,276	54,000 0.1
Hudson's Bay Ter ..	2,340,000	46,800 0.0
Vanconver's Island ..	16,000	1,600 0.1
British Columbia ..	148,000	14,800 0.1
Assiniboia (Red Riv.) ..	.....	6,691 ..
Canada West ..	147,832	1,350,923 9.2
Canada East ..	209,990	1,220,514 5.9
New Brunswick ..	27,704	213,180 7.7
Nova Scotia, etc. ..	18,746	303,728 16.2
Prince Edward Isl'd ..	2,134	68,946 32.3
Newfoundland ..	35,913	119,336 3.4
Bermuda Islands ..	19	12,201 642.1
St. Pierre & Miquelon, Fr'ch ..	81	2,226 27.4
United States of America ..	2,963,666	29,636,666 10.0
United States of Mexico ..	829,916	7,859,564 9.4
British Honduras ..	18,604	12,401 0.6
Guatemala ..	43,380	971,450 22.4
Honduras ..	39,600	358,000 9.5
Salvador ..	9,600	394,000 41.0
Nicaragua ..	40,200	257,000 6.3
Costa Rica ..	21,800	215,000 9.8
Mosquitia ..	26,000	6,000 0.2
Total ..	8,424,413	43,134,918 5.1

2.—WEST INDIAN ARCHIPELAGO.

Countries, etc.	Area, sq. m.	Pop., sq. m.
Cuba ..	47,278	1,449,462 30.7
Porto Rico ..	3,865	562,134 14.6
Virgins ..	143	2,600 18.2
Hayti ..	10,081	572,000 56.7
Dominica ..	17,609	136,700 7.9
Bahama Islands ..	5,094	27,519 5.4
Turk's Island, etc. ..	430	4,428 10.3
Jamaica ..	6,250	377,433 60.4
Cayman Islands ..	260	1,760 6.8
Tortola, etc. ..	219	46,312 211.4
Anguilla ..	34	3,052 89.8
Barbuda ..	72	1,707 23.7

* Included in Hudson's Bay Company's Territories.

Countries, etc.	Area, sq. m.	Population.	Pop., sq. m.
St. Christopher ..	68	23,177	340.9
Nevis ..	21	9,601	457.2
Antigua ..	108	37,757	349.6
Montserrat ..	47	7,653	162.9
Dominica ..	274	22,061	80.5
St. Lucia ..	296	24,516	82.9
St. Vincent ..	132	30,128	228.2
Barbadoes ..	166	135,939	818.9
Grenada ..	155	32,671	210.8
Tobago ..	144	13,208	91.7
Trinidad ..	2,020	68,645	33.9
Guadaloupe ..	529	134,574	254.4
Marie Galante ..	59	12,749	216.0
Desiderade ..	17	2,568	151.1
Les Saintes ..	5	1,311	262.5
St. Martin (N. part) ..	24	3,773	157.1
Martinique ..	382	123,701	323.8
Curacao ..	138	16,831	121.9
Bonaire ..	83	2,339	28.2
Aruba ..	23	3,201	139.2
St. Eustatius ..	97	1,856	19.1
Saba ..	16	1,709	106.8
St. Martin (S. part) ..	12	2,918	243.2
St. Thomas ..	27	13,666	506.1
Santa Cruz ..	78	23,729	304.2
St. John ..	22	2,228	101.3
St. Bartholomew, (Svedish) ..	25	9,000	360.0
Total ..	96,293	3,946,616	40.9

3.—SOUTH AMERICA.

Countries, etc.	Area, sq. m.	Population.	Pop., sq. m.
Granadan Confederation ..	521,948	2,363,054	4.51
Venezuela ..	426,712	1,361,386	3.19
Ecuador ..	206,692	1,108,042	5.36
British Guayana ..	96,315	127,695	1.32
Dutch Guayana ..	59,764	60,080	1.01
French Guayana ..	27,509	22,010	0.80
Brazil ..	2,973,406	7,677,800	2.59
Bolivia ..	473,298	2,326,126	4.91
Peru ..	498,726	2,106,492	4.22
Chile ..	249,952	1,558,319	6.23
Argentine Republic ..	832,129	1,156,000	1.39
Buenos Ayres ..	294,136	303,355	1.03
Paraguay ..	86,102	600,000	6.99
Uruguay ..	73,538	177,300	2.41
Patagonia, etc. ..	210,000	210,000	1.00
Falkland Islands ..	6,297	2,600	0.41
Total ..	7,036,524	21,150,259	3.01

RECAPITULATION.

Countries, etc.	Area, sq. m.	Population.	Pop., sq. m.
North America ..	8,424,413	43,134,918	5.1
West Indies ..	96,303	3,946,616	40.9
South America ..	7,036,524	21,150,259	3.01

Grand total .. 15,557,230 68,231,793 4.4

and to this ought to be added, for uncivilized Indians not included in the above returns—for North America 1,000,000, and South America 1,500,000; which, together with the above enumerated population, will give the aggregate

of human beings now inhabiting the Western World at 70,731,793.

The division of this population according to race, is approximately thus:

	N. Am.	W. Ind.	S. Am.	Total.
Whites ..	76	24	16	38.7
Blacks ..	8	76	24	36.0
Indians ..	16	..	60	25.3

—according to civil condition, thus:

Free ..	90	85	80	85.0
Slave ..	10	15	20	15.0

—and according to creed, thus:

Protestant ..	70	20	1	30.3
Roman Catholic ..	25	80	66	57.0
Pagan ..	5	..	33	12.7

The number of Jews is too small to affect these results.

Massachusetts is the most densely populated portion of the United States, and in 1855 had 145.3 inhabitants to the square mile; and Rhode Island is the next most populous State. Beyond the limits of the Union, Salvador and Nova Scotia, and among the North American islands, the Bermudas and Prince Edward Island, are the most densely populated.

But the island of Barbadoes, in the West Indian Archipelago, is the most populous spot in America, having no less than 818.9 inhabitants to the square mile. The same density would give Cuba 37,715,954 inhabitants.

In South America, the most dense population is found in the Andine region, and it is remarkable to see how materially the ratio falls off as the States severally include a greater portion of plain country. Chile, not occupying any of the eastern plain, stands highest in respect of density. Paraguay is an exception to this law, as it is also exceptional in its physical and historical relations.

R. S. F.

POPULATION OF SAN FRANCISCO.

The Directory of San Francisco for the year 1859 states the population in May of that year to have been as follows:

Whites ..	49,343	males, and 23,985 females.	= 73,328
Chinese ..	2,560	" and 590 "	= 3,150
Colored ..	915	" and 690 "	= 1,605

Total 52,818 " and 25,265 " = 78,083

Males over 21 years—White 38,890, Chinese 2,510, and colored 745; and females over 18 year—15,196, 540 and 531 respectively.

ELEMENTARY STATISTICS OF EUROPEAN STATES.

No. 4.

COMMERCE AND NAVIGATION.

Countries.	Year.	Value of Exports.	Value of Imports.	Cleared.		Entered.	
				Vessels.	Tons.	Vessels.	Tons.
Austrian Empire	1857	\$117,839,972	\$144,696,748	15,307	1,247,427	15,378	1,213,344
Belgium	1856	81,395,800	79,959,200	2,627	534,497	2,572	521,704
Bremen	1857	46,957,104	55,503,585	3,053	555,842	2,985	550,210
Denmark	1856	18,884,282	37,578,910	9,313	755,648	9,358	762,680
French Empire	1857	378,597,100	397,959,260	15,977	2,590,166	25,726	4,121,777
Great Britain, etc.	1857	610,776,185	938,231,675	46,859	11,035,915	45,400	10,553,134
Greece	1855	2,308,533	4,301,282	595	173,736	614	229,412
Hamburg	1857	231,297,551	258,318,488	5,033	1,231,842	5,067	1,250,499
Hanover .....	.....	.....	.....	.....	.....	.....	.....
Holland	1857	135,299,348	164,696,461	8,833	1,685,280	8,783	1,613,319
Ionian Islands	1856	2,859,556	3,446,059	.....	500,928	.....	504,696
Lubeck	1857	.....	67,258,444	1,111	145,758	1,131	146,372
Mechlenburg	1856	.....	.....	.....	92,929	.....	115,471
Modena .....	.....	1,666,000	2,000,000	.....	.....	.....	.....
Oldenburg	1857	.....	.....	6,676	321,690	7,591	344,070
Portugal	1855	17,006,844	21,842,282	9,386	822,043	8,970	762,391
Prussia	1857	.....	.....	.....	600,254	.....	571,661
Roman States	1856	9,685,282	9,797,822	6,586	596,624	7,597	596,988
Russian Empire	1856	128,199,896	98,049,952	10,470	1,857,368	10,976	1,874,808
Sardinia	1856	38,603,553	53,463,067	7,464	842,225	7,488	845,413
Spain	1856	53,181,355	65,207,904	8,608	783,328	9,409	935,300
Sweden	1855	17,891,446	15,837,080	10,565	876,768	6,733	401,760
Norway	1855	29,343,500	17,904,200	10,670	1,089,262	10,502	1,028,003
Turkey	1857	51,872,240	59,115,485	14,147	2,892,641	14,193	2,665,125
Tuscany	1856	11,582,827	15,032,839	4,988	482,600	4,961	481,906
Two Sicilies—Naples ..	1855	13,139,300	11,040,390	945	250,654	1,085	265,953
Sicily	1855	.....	13,712,400	.....	.....	.....	.....

The following exhibits the number of vessels, with their tonnage, and the number of seamen belonging to the principal nations.

Countries.	Vessels.	Tons.	Seamen.
Austrian Empire	9,651	376,239	.....
Belgium	142	40,397	.....
Bremen	279	166,367	.....
Denmark	5,359	226,723	.....
French Empire	12,724	998,996	.....
Great Britain, etc.	26,177	4,367,956	205,727
Greece	4,339	325,000	29,000
Hamburg	491	191,244	.....
Hanover	2,684	105,584	.....
Holland	2,428	586,941	.....
Ionian Islands .....	.....	26,801	.....
Lubeck	69	12,480	.....
Mechlenburg	357	78,278	.....
Modena .....	.....	.....	.....
Oldenburg	595	61,840	2,681
Portugal .....	.....	.....	.....
Prussia	1,035	340,000	9,407
Roman States	1,842	41,360	10,776
Russian Empire .....	.....	.....	.....
Sardinia	2,934	197,924	31,987
Spain	11,952	455,685	124,891
Sweden	2,874	252,472	.....
Norway	3,772	383,089	22,904
Turkey .....	.....	.....	.....
Tuscany	959	590,023	.....
Two Sicilies—Naples ..	10,863	202,318	.....
Sicily	2,031	47,438	.....

A COINCIDENT PERIOD IN AMERICAN STATISTICS.

By adding successively a cipher or ciphers, the figures "29,636" will express the present (1st July, 1859) sum of the railroads, post routes, territorial extent and population of the United States. Thus we have approximately:

29636..... miles of railroad,
296360..... miles of post-route,
2963600.....square miles of territory,
29636000.....mouths in population,

—facts exhibiting in their representative numbers a progression equivalent to our dollar, dime, cent and mill system of money; and eminently typical of American "go-ahead-iveness," which abhors to do anything by halves. Such a concurrence of arithmetical ideosyncracies may never again occur, and never will unless our "fillibusters" succeed in enlarging "the area of freedom" in a ratio commensurate with the expansion of our population and the development of our means of internal communication.

STATISTICS OF AMERICAN STATES.

NO. 7.

GRANADAN CONFEDERATION.

(Formerly the "Republic of New Granada.")

Lat. 12° 30' N. to 3° 40' S. | Populat'n (1856) 2,363,054.
 Long. 65° 50' to 83° 10' W. | Density, 4.51 to sq. mile.
 Area, 521,948 sq. miles. | Capital, STA FE DE BOGOTA.

GOVERNMENT.

Executive.—A President, elected by the people for four years. The present incumbent was elected 20 July, 1857.

Administration.—1. Minister of the Interior; 2. Minister of Foreign Relations; 3. Minister of Finance, all appointed by the President; and 4. the Attorney General.

Legislature.—A Congress, consisting of a Senate of twenty-four members, three from each State, and a House of Representatives of thirty-eight members, apportioned in the ratio of one to every 70,000 inhabitants, and an additional member where any State has a fractional remainder of 25,000 or upwards. Members of both houses are elected by direct popular vote for two years. The annual session commences 1st Feb., and its duration is limited to 70 days. Members, though they can only vote in their respective houses, may speak in both or either.

Judiciary.—A Supreme Court at the capital, with three justices elected by the people; and circuit and district courts. The Attorney-General is elected for four years, as are also the justices of the Supreme Court, the latter being also the judges of the circuits.

National Religion.—The Holy Apostolic Roman Catholic. The establishment is under the charge of the Archbishop of Santa Fe de Bogota, and the Bishops of Popayan, Pamplona, Antioquia, Cartagena and Santa Marta. All other religions are tolerated and protected.

State Organization.—Each of the eight States composing the Confederation has its separate Governor, Legislature and Judiciary, and is entirely independent in all that relates to its internal affairs. The national government alone has cognizance of foreign relations.

STATES OF THE CONFEDERATION.

(According to the Constitutional Law of 27 Feb., 1855.)

States, etc.	Old Provinces.	Population.
PANAMA	Panama	52,522
(Cap., Panama)	Azuero	34,643
—29,805 sq. m.	Veraguas	33,864
	Chiriqui	17,279—138,308
BOLIVAR	Cartagena	103,783
(Cap., Cartagena)	Sabanilla	48,167
—34,372 sq. m.	Mompox	30,207—182,157

States, etc.	Old Provinces.	Population.
MAGDALENA	Santa Marta	36,485
(Cap., Santamarta)	Rio Hacha	17,247
—36,109 sq. m.	Valle d'Upur	14,032
	Ocana (part)	5,222—72,986
SANTANDER	Ocana (part)	18,680
(Cap., Pamplona)	Pamplona	62,990
—19,637 sq. m.	Santander	21,282
	Soto	54,767
	Socorro	157,085
	Velez (part)	64,024—378,828
ANTIOQUIA	Antioquia	75,053
(Cap., Antioquia)	Cordoba	90,841
—33,715 sq. m.	Medellin	77,494—243,388
BOYACA	Tunja	133,463
(Cap., Tunja)	Tundama	152,753
—54,849 sq. m.	Casanare	18,573
	Velez (part)	45,397—350,186
CUNDINAMARCA	Bogota	144,592
(Cap., Bogota)	Cundinamarca	81,215
—116,480 sq. m.	Mariquita	86,894
	Tequendama	56,126
	Zipaquira	83,125
	Neiva (part)	94,918—546,870
CAUCA	Choco	43,649
(Cap., Popayan)	Buenaventura	31,150
—198,981 sq. m.	Cauca	70,748
	Popayan	77,105
	Pasto	27,620
	Barbacoas	26,519
	Tuquerres	43,107
	Neiva (part)	6,757
	Ter. del Caqueta ..	3,676—330,331

Total population 2,243,054

RACES AND CASTES.

Caucasians	450,003
American civilized races	301,000
Negros	80,000
Mixed—Quadroons	30,054
Mestizos	998,997
Mulattoes	283,000
Zamboes	100,000
	1,412,051

—and besides there are of uncivilized Indians dwelling in the plains from 108,000 to 120,000.

PROGRESS OF POPULATION.

Year	Population.	Incr. per cent.
1770	806,209	
1783	1,046,641	1770-1783
1825	1,258,259	1783-1825
1835	1,687,109	1825-1835
1843	1,932,279	1835-1843
1853	2,243,054	1843-1853

CHIEF TOWNS.

Bogota (capital) 29,649, Guaduas 9,049, Chocoma 8,460, Neiva 7,716, Ybague 7,152, Ubaté 6,754, Tocayma 6,574.
 Popayan 22,708, Cali 11,848, Pasto 8,136,

Cartago 6,744, Buga 6,513, Tuquerres 6,100, Barbacoas 5,249.

Medellin 13,755, Antioquia 8,637, Rio Negro 3,009.

Velez 11,178, Moniquira 9,127, Tunja 5,122, Santa Rosa 4,996, Leiva 3,305.

Socorro 15,015, Bucaramanga 10,018, Pamplona 9,095, San Jose 5,741, Ocana 5,046.

Cartagena 9,896, Mompox 7,336, Santa Marta 4,340, Rio Hacha 2,974.

Panama 6,566, Aspinwall 2,000, David 2,800, Los Santos 2,004, Chagres 1,340, Porto Bello 1,185.

COMMERCE.*

	1855-'56.	1856-'57.
Imports.....		\$3,255,843
Exports.....	\$7,929,350	7,064,584

* Distribution of Commerce, 1856-'57.

	Imports.	Exports.
U. Kingdom...	\$1,748,682	\$3,466,645
France.....	676,306	Bremen..... 1,340,577
United States..	302,016	Venezuela.... 915,277
Venezuela....	212,862	United States.. 434,487
West Indies...	185,249	Peru..... 427,572
Peru.....	62,322	West Indies... 264,838
Bremen, etc...	34,581	France, etc.... 124,507

COMMERCE WITH UNITED STATES.

(From Report of U. S. Treasury Department.)

Years.	Exports from U. S.			Imports into U. States.
	Domestic Produce.	Foreign Produce.	Total	
1849.....	\$244,460	\$53,324	\$297,784	\$158,960
1850.....	970,619	295,600	1,266,219	591,992
1851.....	2,507,701	533,121	3,040,822	695,606
1852.....	1,298,236	217,558	1,515,794	750,527
1853.....	753,391	103,079	856,470	553,528
1854.....	855,254	82,052	937,306	1,478,520
1855.....	892,245	169,800	1,062,045	1,799,672
1856.....	1,444,843	166,549	1,611,392	2,325,019
1857.....	1,770,209	267,480	2,037,689	2,468,169
1858.....	1,489,583	199,084	1,688,667	3,099,721

The great difference in the value of the commerce as given by the New Granadan and American returns is found in the fact that the first takes no note of the supplies for the railroad and steamship service of the Isthmus.

FINANCES.

	Revenue.	Expenditures.
1851-'52.....	\$1,553,513	\$2,145,779
1852-'53.....	2,227,567	2,842,184
1853-'54.....	1,939,662	2,731,850
1854-'55.....	1,461,535	2,029,531
1855-'56.....	1,895,983	1,456,148
1857-'58.....	1,916,508	1,839,078

Public Debt, 1856.....\$33,129,730

* Not including the transit commerce of the Isthmus.

PRODUCTION OF GOLD 1856-'57.

From washings without machinery.....	\$1,669,000
" rivers with machinery.....	1,000,000
" veins by chemical process.....	687,923
Total production.....	\$3,356,923

PANAMA RAILROAD.

Opened for traffic from Aspinwall—

1852, 1 March, to Ahorea Lagato.....	13 miles.
" 13 " to Bujio Soldado.....	16 "
" 6 July, to Barbacoas.....	23 "
1854, 31 January, to Obispo.....	31 "
" 1 September, to Summit.....	37 "
1855, 28 January, to Panama.....	47½ "

ARMED FORCE.

In 1857, by a law of Congress, the regular army was reduced to 500 men, who were to form a demi-battalion of light infantry, to be stationed at Bogota. Besides this force there are two companies of light infantry in the State of Cauca, and one regiment of artillery of four companies, a part of which is stationed at Panama, and the remainder at Cartagena and Santa Marta. The national guard or militia is charged with the quiet of the interior, and belongs to the States severally.

WEIGHTS, MEASURES AND MONEYS.

Old—On the Spanish basis.

New—French metrical values. R. S. F.

BRITISH MERCANTILE MARINE.

(Official Return, December 31, 1856.)

1.—TOTAL SHIPPING.

	Vessels.	Tons.	Seamen.
England and Wales.....	19,778	3,461,031	156,913
Scotland.....	3,354	592,974	29,987
Ireland.....	2,203	250,455	13,403
Isle of Man and Channel Islands.....	842	62,496	5,424
Colonies.....	9,835	945,480	61,846

Total.....36,012 5,312,436 267,573

2.—STEAM VESSELS—(included in above.)

	Vessels.	Tons.
England and Wales.....	1,272	275,635
Scotland.....	270	73,534
Ireland.....	145	35,869
Isle of Man.....	6	1,192
Channel Islands.....	4	232
Colonial.....	253	32,275

Total.....1,950 418,737

3.—SEAMEN.

England and Wales.....	156,913
Scotland.....	29,987
Ireland.....	13,403
Isle of Man and Channel Islands.....	5,424
Colonies.....	61,846

Total.....267,573

LIBRARY DEPARTMENT.

BOOKS, MAPS AND CHARTS, ETC.,

Purchased and donated since last Report.

BOOKS, ETC., ADDED BY DONATION.

CANADIAN WORKS—(*Presented by the Library of Parliament.*)

- Salmon Fisheries of the St. Lawrence and its tributaries. Montreal, 1857. 1 vol., 12mo., pp. 144; cloth.
- Geological Survey of Canada. Reports for 1853, '54, '55 and '56. Toronto, 1 vol., 8vo., pp. 494; cloth.
- Geological Survey of Canada: Sir W. E. Logan, Director. Figures and Descriptions of Canadian organic remains. Decade III. Montreal, 1858. 1 vol., 8vo., with plates. bound.
- Report on the Exploration of the Country between Lake Superior and the Red River Settlement. Toronto, 1856. 1 vol., 8vo., with plates; bound.
- Catalogue of the Library of Parliament: Books on America and General Index. Toronto, 1858. 1 vol., 8vo., pp. 822; cloth. [This volume is continuous from the volume published in 1857, and is pagged from 1072 to 1896.]
- Report from the Select Committee on the Hudson's Bay Company. (House of Commons, 1857.) 1 vol., 4to., pp. 548; bound.
- Tables of the Trade and Navigation of the Provinces of Canada for the year 1857. Toronto, 1858. 1 vol., 8vo., pp. 262; cloth.
- Map of the Northwest part of Canada, the Indian Territories and Hudson's Bay. Compiled and drawn by Thomas Divine, Provincial Surveyor, etc. Toronto, 1857. (On cloth, dissected and enclosed in a handsome case resembling a quarto volume.)
- The Canadian Directory for 1857, '58. Montreal. Jno. Lovell. 1 vol., large 8vo., pp. 1544.

BRITISH COLUMBIA—(*Presented by Hon. Charles P. Daly.*)

- Papers on the Affairs of British Columbia: (Blue Book.) London, 1859. 1 vol., folio, pp. 84, with map.

AGRICULTURE—(*Presented by Benj. Perley Poore, Esq.*)

- The Quarterly Journal of Agriculture for April, 1859. Washington. 1 pamphlet, 8vo., pp. 88.

EDUCATION—(*Presented by the Publishers.*)

- Ohio Journal of Education for May, 1858. 8vo., 1 pamphlet.

DOMESTIC INDUSTRY—(*Presented by Hon. John R. Bartlett.*)

- Transactions of the Rhode Island Society for the encouragement of Domestic Industry for the year 1858. Providence. 1 vol., 8vo., pp. 199.

CITY OF LAWRENCE—(*Presented by his Honor, the Mayor.*)

- Twelfth Annual Report of the Public Schools of the City of Lawrence. Lawrence, 1859. 1 pamph., 8vo., pp. 76.
- Sixth Annual Report of the Finances of the City of Lawrence. Lawrence, 1859. 1 pamph., 8vo., pp. 36.

CONGRESSIONAL DOCUMENTS—(*Presented by the Hon. J. H. Hammond, U. S. Sen.*)

- Congressional Globe, 1st Series, 35th Cong., with appendix. Washington. 4 vols., 4to.
- Reports of Explorations and Surveys for a Railroad Route from the Mississippi River to the Pacific Ocean; vol. 8. Washington. 1 vol., 4to., pp. 757.
- U. S. Naval Astronomical Expedition to the Southern Hemisphere; vol. 3. Washington. 1 vol., 4to., pp. 492.
- Message of the President and accompanying Documents, 1857-'58. Washington. 3 vols., 8vo., pp. 492.
- Annual Report of the Smithsonian Institution, 1857. Washington. 1 vol., 8vo., pp. 438.

- Report of the Superintendent of the Coast Survey, 1856. Washington. 1 vol., 4to., pp. 258, with charts.

VITAL STATISTICS—(*Presented by the Author.*)

- Report exhibiting the experience of the Mutual Life Insurance Company of New York. By Shepherd Homans, Esq., Actuary. New York. 1 vol., 4to., pp. 34. (This volume, of which only 100 copies were printed, is issued for private circulation only.)

BOOKS, ETC., ADDED BY PURCHASE.

- Stedman's Narrative. 2 vols., 4to.
- Macartney's Embassy. 2 vols., 4to.
- Coxe's Travels. 2 vols., 4to.
- Belcher's Last Voyages. 2 vols., 8vo.
- Speed's Maps (Atlas), 1676. 1 vol., folio.
- Heriot's Travels through Canada. 1 vol., 4to.
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- Birbeck's Letters from Illinois; 1818.
 Pinkerton's Geography. 1 vol., 8vo.
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 School Report, 1845. 1 vol., 8vo.
 Political Economy. 1 vol., 8vo.
 Force's National Calender, 1821, '23, and '24.
 3 vols., 12mo.
 Dufrenoy and Beaumont's Voyage Metal-
 urgique en Angleterre. 1 vol., 8vo.
 Mugge's Switzerland. 2 vols., 12mo.
 Hayward's Gazetteer of New Hampshire. 1
 vol., 8vo.
 Cretuel's Gazetteer. 1 vol., 8vo.
 New York City Directories. 5 vols.
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 Bailey's Central America. (Map in covers.)
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 8vo.
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